

# Washington Metro HIV Annual Epidemiological Profile

Data reported through June 30, 2017

Center for HIV Surveillance, Epidemiology and Evaluation Infectious Disease Prevention and Health Services Bureau Prevention and Health Promotion Administration Maryland Department of Health http://phpa.health.maryland.gov/OIDEOR/CHSE 1-800-358-9001

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### Section I – Background Information

### HIV/AIDS Reporting Requirements

The Maryland HIV/AIDS Reporting Act of 2007 went into effect on April 24, 2007. The law expanded HIV/AIDS reporting and required that HIV cases be reported by name. The following highlights the reporting requirements of Health-General Articles 18-201.1, 18-202.1, and 18-205 of the Annotated Code of Maryland, as specified in the Code of Maryland Regulations (COMAR) 10.18.02.

- Physicians are required to report patients in their care with diagnoses of HIV or AIDS immediately to the Local Health Department where the physician's office is located by mailing the Maryland Confidential Morbidity Report (DHMH 1140). Reports are also accepted by phone.
- Physicians are required to report infants born to HIV positive mothers within 48 hours to the Maryland Department
  of Health by mailing the Maryland Confidential Morbidity Report (DHMH 1140). Reports are also accepted by
  phone.
- Clinical and infection control practitioners in hospitals, nursing homes, hospice facilities, medical clinics in
  correctional facilities, inpatient psychiatric facilities, and inpatient drug rehabilitation facilities are required to report
  patients in the care of the institution with diagnoses of HIV or AIDS within 48 hours to the Local Health
  Department where the institution is located by mailing the Maryland Confidential Morbidity Report (DHMH 1140).
  Reports are also accepted by phone. Facilities with large volumes are encouraged to contact the Maryland
  Department of Health to establish electronic reporting.
- Laboratory directors are required to report patients with laboratory results indicating HIV infection (e.g., positive confirmatory HIV diagnostic tests, all CD4 immunological tests, all HIV viral load tests, and all HIV genotype and phenotype tests) within 48 hours to the Local Health Department where the laboratory is located, or if out of state to the Maryland Department of Health, by mailing the State of Maryland HIV/CD4 Laboratory Reporting Form (DHMH 4492). Laboratories are encouraged to contact the Maryland Department of Health to establish electronic reporting.

Reporting forms and instructions, including mailing addresses and phones numbers, are available on our website: https://phpa.health.maryland.gov/OIDEOR/CHSE/Pages/reporting-material.aspx

### For Assistance with HIV/AIDS Reporting

For assistance with reporting, including establishment of routine, electronic, or other alternate methods of reporting to the Maryland Department of Health, please contact the Center for HIV Surveillance, Epidemiology and Evaluation in the Maryland Department of Health at 410-767-5227.

#### Limitations in the HIV/AIDS Data

This epidemiological profile only contains data for HIV and AIDS cases that have been diagnosed by a health care provider, were reported to the health department by name, and were residents of Maryland at the time of diagnosis or are current residents of Maryland as of 12/31/2016. Nationally, it has been estimated that 15.0% of people living with HIV infection are undiagnosed. In Maryland, it has been estimated that 15.3% of people living with HIV infection are undiagnosed. In addition, despite a massive effort during which over 17,000 HIV cases were reported after the Maryland HIV reporting law changed on April 24, 2007, not all diagnosed HIV cases previously reported by Maryland's code-based identifier were located and re-reported by name. Many of the re-reported HIV cases were identified by a recent diagnosis and not by their earliest diagnosis, resulting in an under-reporting of HIV diagnoses before 2001 and an over-reporting of HIV diagnoses from 2001 to 2008. Surveillance is the ongoing systematic collection, analysis, interpretation, and dissemination of case report data. Case report data are only available for cases receiving medical care, often only at facilities in Maryland, and only includes information that has been reported to the health department. Linkage to care data is based solely on laboratory data reported to the health department.

This epidemiological profile provides estimates of living Maryland diagnosed cases by current residence as of 12/31/2016. Residence at diagnosis is used exclusively to describe new HIV and AIDS diagnoses. Current residence data are restricted to cases for which there is a case report form or laboratory test reported between 1/1/2009 and 6/30/2017. Restricting address data to recent years presents the most accurate data available and helps to account for cases that may have moved out of state whose data would no longer be reported in Maryland. However, current residence data excludes cases that may still be residents of Maryland but have not received any HIV care during the most recent eight and a half years. In addition, residence is dynamic and cases may have resided at multiple addresses that cannot all be represented in single time point estimates.

For additional information regarding current residence, please contact the Center for HIV Surveillance, Epidemiology and Evaluation in the Maryland Department of Health at 410-767-5227.

### Stages of a Case of HIV/AIDS

Untreated HIV disease progresses from HIV infection to AIDS to death. These are biological events that occur whether or not a person receives any medical care. For example, a person can be HIV infected but never have an HIV test and so they do not have an HIV diagnosis. A medical provider diagnoses that these biological events have occurred and records them as a medical event. The law requires medical providers to report these medical events to the Health Department, thereby creating a surveillance event.

Time Point	Biological Event	Medical Event	Surveillance Event
1	HIV Infection		
2		HIV Diagnosis	
3			HIV Report
4	AIDS Conditions		
5		AIDS Diagnosis	
6			AIDS Report
7	Death		
8		Death Diagnosis	
9			Death Report

A case of HIV/AIDS can only move through time in one direction, from HIV infection to death report [from time point 1 to time point 9], but may skip over individual stages. Events can occur simultaneously, but usually there is a time lag between them. The time lag between events can be measured in days, months, and years.

For example, the time between HIV infection [time point 1] and the test that diagnoses HIV [time point 2] may be several years, and it may then take several days for the laboratory and physician to report the diagnosis to the health department [time point 3]. In a second example, a person with diagnosed and reported HIV infection [time point 3] may die [time point 7] without developing AIDS, thereby skipping the three AIDS events (conditions, diagnosis, and report [time points 4, 5 and 6]). And in a third example, a person with undiagnosed HIV infection [time point 1] may become sick, enter the hospital, and die [time point 7] of what is later determined to be AIDS. In that situation, HIV diagnosis [time point 2], AIDS diagnosis [time point 5], and death diagnosis [time point 8] would all occur at the same time, and that would probably be many years after the initial HIV infection [time point 1].

### Changes in Case Terminology

The terminology for HIV and AIDS cases was changed from earlier epidemiological profiles to be more precise, with Reported Diagnoses replacing Incidence and Living Cases replacing Prevalence. Incidence is a measure of the number of new events (such as HIV infections) in a population during a period of time. Prevalence is a measure of the number of people living with a condition (such as HIV) in a population at a certain time. Prevalence includes both newly and previously diagnosed cases as well as undiagnosed infections. For HIV, Incidence and Prevalence cannot be directly measured and must be estimated using statistical methods. The HIV surveillance system is able to provide the actual number of diagnoses and deaths that are reported in the population.

For this epidemiological profile, the reports received through a certain time (six months after December 31<sup>st</sup> of the specified year) are used to generate the number of diagnoses during the prior years. This lag time allows for delays in reporting and time to complete investigations. Instead of the previous one-year lag, this epidemiological profile utilizes a six-month lag, and as a result, data on exposure category and deaths for the prior year are preliminary. For example, the Reported HIV Diagnoses for 2016 are the total of the reported HIV cases with or without an AIDS diagnosis, diagnosed with HIV during 1/1/2016-12/31/2016, as reported by name through 6/30/2017.

To calculate the number of Living Cases we count up all of the Reported Diagnoses from the beginning of the epidemic (all the new cases each year) and subtract all of the Reported Deaths. For example, the Total Living HIV Cases on 6/30/2017 are the total of the reported HIV Cases with or without an AIDS diagnosis and not reported to have died as of 12/31/2016 as reported by name through 6/30/2017.

#### Laboratory Data

CD4+ T-lymphocyte tests are measures of a person's immune system function. An HIV infected adult is considered to have AIDS if they have less than 200 CD4+ cells per microliter of blood or if the percent of T-Lymphocyte cells that are CD4+ cells is less than 14%. Viral load (VL) tests are measures of the amount of HIV in a person's body. The goal of HIV treatment is to have a very low number of copies of virus per milliliter of blood, below what the test can measure, which is called an undetectable level. Low levels of VL, such as less than 200 copies per milliliter of blood, are known as viral suppression. Treatment recommendations are that a person in HIV medical care should have their CD4 and VL levels measured regularly, at least once per year. We use the presence of these lab tests as an indicator that someone has been "linked to care" after diagnosis or is "retained in care."

#### Sources of Data

Information on HIV and AIDS diagnoses, including residence at diagnosis, age, race/ethnicity, sex at birth, current gender, country of birth, vital status, HIV exposure category, and CD4 and HIV viral load test results are from the Maryland Department of Health's Enhanced HIV/AIDS Reporting System (eHARS), June 30, 2017.

Population data by sex, age, and race/ethnicity are from the July 1, 2016 U.S. Census Estimates. Population data by country-of-birth are from the Census Bureau's 2015 American Community Survey. This produces a difference in total population due to the different source. Due to estimation limitations, some population totals may not equal the sum of its components. When needed, age groups were divided by assuming uniform age distribution within the age group. Non-Hispanic multiple race and Non-Hispanic some other race from the Census were combined into one group.

Estimations of those undiagnosed are from Centers for Disease Control and Prevention's 2015 HIV Surveillance Supplemental Report published July 2017. The continuum of care is adapted from a 2011 article in Clinical Infectious Diseases in which a continuum of care "cascade" is used to illustrate estimates of the number of persons living with HIV who belong to each of the stages of engagement in HIV care.

#### **Tabulation of Column Totals**

Numbers in figures, tables and generally in the text have been rounded. Discrepancies in tables between totals and sums of components are due to rounding.

#### **Data Suppression**

In order to protect the confidentiality of reported HIV cases, data are suppressed in the following instances:

- Data describing a demographic group or geographic area (e.g. ZIP code) with a population less than 1,000 people.
- All clinical/laboratory information if it is describing less than 5 cases.
- All exposure/risk information if it is describing less than 5 cases, except in the case of "other" exposure.
- If any cell is suppressed, additional cells are also suppressed as necessary to prevent back calculation of the suppressed cell(s).

### **HIV Exposure Categories**

The Centers for Disease Control and Prevention (CDC) developed a hierarchy of exposure categories for surveillance purposes. Persons with more than one reported risk factor are classified in the exposure category listed first in the hierarchy and therefore counted only once. Men who have sex with men and report injection drug use constitutes a separate transmission category.

MSM/IDU: Men who report a history of sexual contact with other men who also have engaged in injection drug use.

**Men who have Sex with Men (MSM):** Men who report a history of sexual contact with other men (homosexual contact) including men who report sexual contact with both men and women (bisexual contact).

**Injection Drug Use (IDU):** Men or women who report receiving an injection, either self-administered or given by another person, of a drug that was not prescribed by a physician.

**Heterosexual Exposure (HET)**: Men or women who report a history of sexual contact with a person of the opposite sex who is known to have an HIV infection or at high risk for an HIV infection. High risk groups include bisexual men, IDUs and recipients of blood, blood components, transplants of organ or tissue and artificial insemination.

Perinatal Exposure: Any baby born to an HIV positive mother.

**Other Exposure**: Includes men or women who received clotting factor for hemophilia/coagulation disorder, or received a transfusion of blood/blood components, or received a transplant of tissue/organs or artificial insemination, or worked in a health care or clinical laboratory setting.

Not all exposure data is reported and is therefore missing for some cases. Multiple imputation is a statistical method by which missing exposure categories are replaced with estimated or probable exposure categories. Multiple imputation involves filling in the missing exposure category with multiple possible exposures, creating several complete datasets. Filling in the missing exposure category is done using the observed data for the individual case as well as data in aggregate from other cases in Maryland. The complete datasets, containing the various predictions for each missing exposure category, are combined to create a final dataset with previously missing exposure category replaced by weighted estimates.

#### **MDH Non-Discrimination Statement**

The Maryland Department of Health (MDH) complies with applicable Federal civil right laws and does not discriminate on the basis of race, color, national origin, age, disability in its health programs and activities.

#### **English**

Help is available in your language: 410-767-5227 (TTY: 1-800-735-2258). These services are available for free.

#### Español/Spanish

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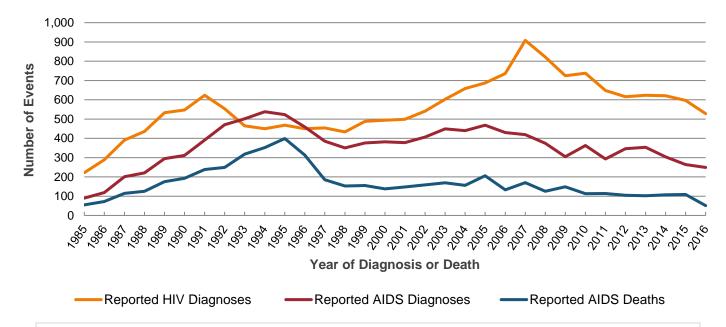
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### Section II - Trends 1985-2016

# Figure 1 – Trends in Reported HIV and AIDS Diagnoses and Deaths, 1985-2016, Reported through 6/30/2017

Reported HIV Cases with or without an AIDS Diagnosis (Reported HIV Diagnoses) by Year of HIV Diagnosis, Reported HIV Cases with an AIDS Diagnosis (Reported AIDS Diagnoses) by Year of AIDS Diagnosis, and Reported HIV Cases with an AIDS Diagnosis Reported to have Died of Any Cause (Reported AIDS Deaths) by Year of Death, from 1985 through 2016 as Reported through 6/30/2017



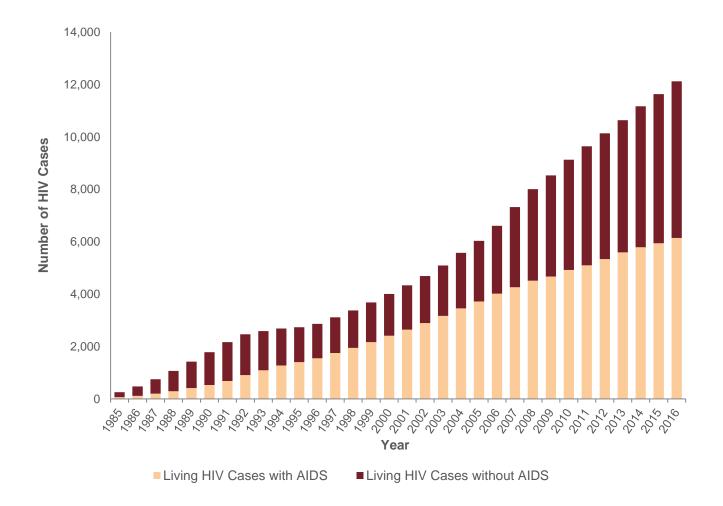
During the 2007-2008 transition to name-based reporting, many HIV cases were reported by a recent HIV diagnosis and not by their earliest HIV diagnosis, resulting in an artificial upward trend in HIV diagnoses during the period 2001-2008.

YEAR OF DIAGNOSIS OR DEATH	REPORTED HIV DIAGNOSES	REPORTED AIDS DIAGNOSES	REPORTED AIDS DEATHS	YEAR OF DIAGNOSIS OR DEATH	REPORTED HIV DIAGNOSES	REPORTED AIDS DIAGNOSES	REPORTED AIDS DEATHS
<1985	111	60	28	2001	499	378	148
1985	222	90	55	2002	541	407	159
1986	289	119	72	2003	603	449	169
1987	391	201	115	2004	658	440	156
1988	436	221	125	2005	687	468	206
1989	533	295	175	2006	736	430	133
1990	547	311	193	2007	908	419	170
1991	623	391	238	2008	822	374	125
1992	554	471	249	2009	725	305	149
1993	465	501	318	2010	738	363	113
1994	450	538	352	2011	648	293	114
1995	468	523	399	2012	616	346	105
1996	450	459	313	2013	623	354	102
1997	454	385	185	2014	621	304	107
1998	433	350	153	2015*	597	264	109
1999	488	376	155	2016*	528	249	51
2000	494	382	138	TOTAL	17,958	11,516	5,379

<sup>\*2015-2016</sup> reported AIDS deaths are preliminary.

### Figure 2 – Trends in Living HIV Cases, 1985-2016, Reported through 6/30/2017

Reported HIV Cases with or without an AIDS Diagnosis and Not Reported to have Died as of December 31st of Each Year (Living HIV Cases without AIDS, Living HIV Cases with AIDS, and Total Living HIV Cases) from 1985 through 2016, as Reported through 6/30/2017

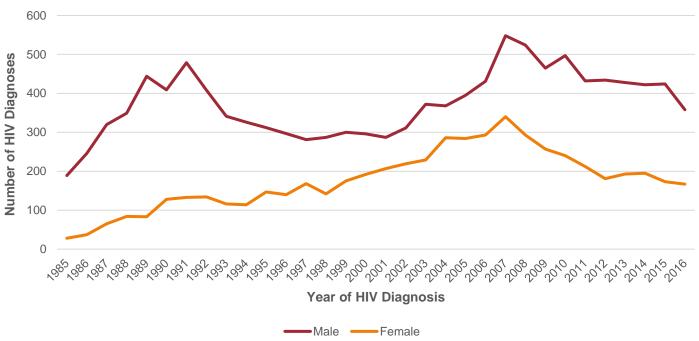


YEAR	LIVING HIV CASES WITHOUT AIDS	LIVING HIV CASES WITH AIDS	TOTAL LIVING HIV CASES	YEAR	LIVING HIV CASES WITHOUT AIDS	LIVING HIV CASES WITH AIDS	TOTAL LIVING HIV CASES
1985	192	66	258	2001	1,689	2,644	4,333
1986	362	113	475	2002	1,798	2,892	4,690
1987	554	199	753	2003	1,920	3,172	5,092
1988	771	295	1,066	2004	2,117	3,456	5,573
1989	1,010	415	1,425	2005	2,314	3,718	6,032
1990	1,248	533	1,781	2006	2,591	4,015	6,606
1991	1,484	686	2,170	2007	3,060	4,264	7,324
1992	1,559	908	2,467	2008	3,494	4,513	8,007
1993	1,496	1,091	2,587	2009	3,859	4,669	8,528
1994	1,406	1,278	2,684	2010	4,211	4,919	9,130
1995	1,329	1,404	2,733	2011	4,543	5,098	9,641
1996	1,311	1,551	2,862	2012	4,795	5,339	10,134
1997	1,361	1,751	3,112	2013	5,047	5,591	10,638
1998	1,426	1,948	3,374	2014	5,378	5,788	11,166
1999	1,510	2,169	3,679	2015	5,688	5,943	11,631
2000	1,595	2,413	4,008	2016	5,980	6,141	12,121

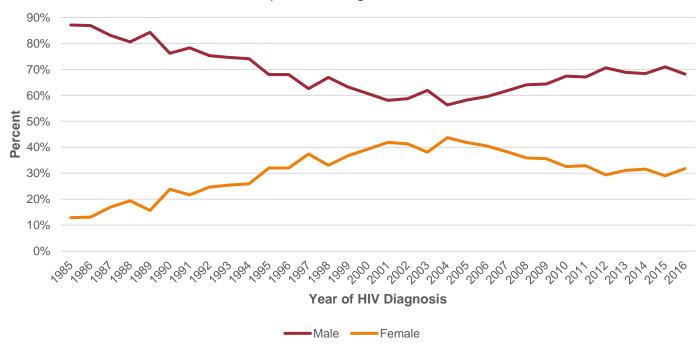
# Figure 3 – Trends in Adult/Adolescent Reported HIV Diagnoses by Sex at Birth, 1985-2016, Reported through 6/30/2017

Number and Percent by Sex at Birth of Adult/Adolescent Reported HIV Cases, Age 13+ at HIV Diagnosis, with or without an AIDS Diagnosis (Adult/Adolescent Reported HIV Diagnoses) by Year of HIV Diagnosis from 1985 through 2016, as Reported through 6/30/2017





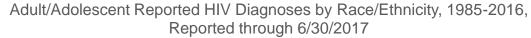
### Adult/Adolescent Reported HIV Diagnoses by Sex at Birth, 1985-2016, Reported through 6/30/2017

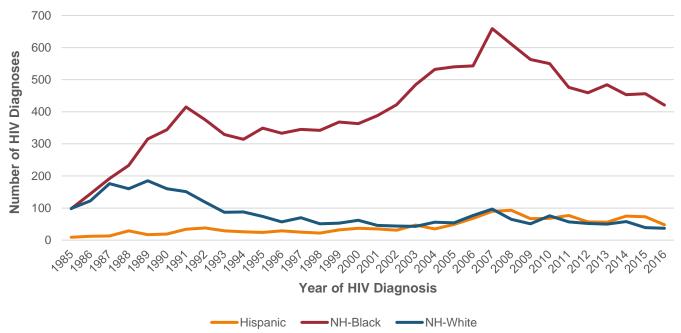


		ADULT/ADOLESC	ENT REPORTED HIV DIA	AGNOSES	
YEAR OF HIV DIAGNOSIS			SEX AT BIR	тн	
TEAR OF HIV DIAGNOSIS	No.	Male		Female	
		No.	%	No.	%
<1985	110	99	90.0%	11	10.0%
1985	217	189	87.1%	28	12.9%
1986	283	246	86.9%	37	13.1%
1987	385	320	83.1%	65	16.9%
1988	433	349	80.6%	84	19.4%
1989	527	444	84.3%	83	15.7%
1990	537	409	76.2%	128	23.8%
1991	612	479	78.3%	133	21.7%
1992	542	408	75.3%	134	24.7%
1993	457	341	74.6%	116	25.4%
1994	440	326	74.1%	114	25.9%
1995	459	312	68.0%	147	32.0%
1996	437	297	68.0%	140	32.0%
1997	449	281	62.6%	168	37.4%
1998	429	287	66.9%	142	33.1%
1999	475	300	63.2%	175	36.8%
2000	488	296	60.7%	192	39.3%
2001	494	287	58.1%	207	41.9%
2002	530	311	58.7%	219	41.3%
2003	601	372	61.9%	229	38.1%
2004	654	368	56.3%	286	43.7%
2005	679	395	58.2%	284	41.8%
2006	724	431	59.5%	293	40.5%
2007	888	548	61.7%	340	38.3%
2008	817	524	64.1%	293	35.9%
2009	722	465	64.4%	257	35.6%
2010	737	497	67.4%	240	32.6%
2011	644	432	67.1%	212	32.9%
2012	615	434	70.6%	181	29.4%
2013	621	428	68.9%	193	31.1%
2014	617	422	68.4%	195	31.6%
2015	597	424	71.0%	173	29.0%
2016	525	358	68.2%	167	31.8%
Total	17,745	12,079	68.1%	5,666	31.9%

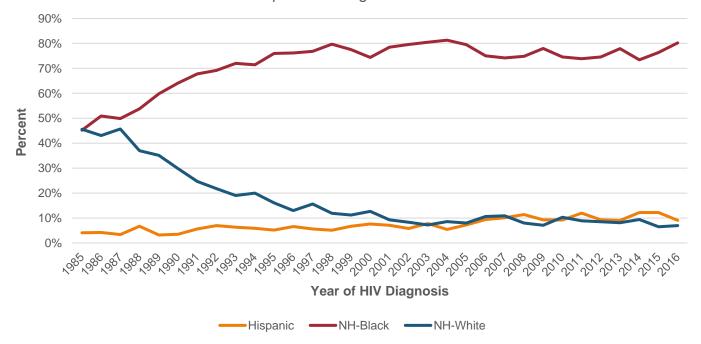
# Figure 4 – Trends in Adult/Adolescent Reported HIV Diagnoses by Race/Ethnicity, 1985-2016, Reported through 6/30/2017

Number and Percent by Race/Ethnicity of Adult/Adolescent Reported HIV Cases, Age 13+ at HIV Diagnosis, with or without an AIDS Diagnosis (Adult/Adolescent Reported HIV Diagnoses) by Year of HIV Diagnosis from 1985 through 2016, as Reported through 6/30/2017





## Adult/Adolescent Reported HIV Diagnoses by Race/Ethnicity, 1985-2016, Reported through 6/30/2017

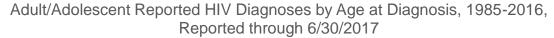


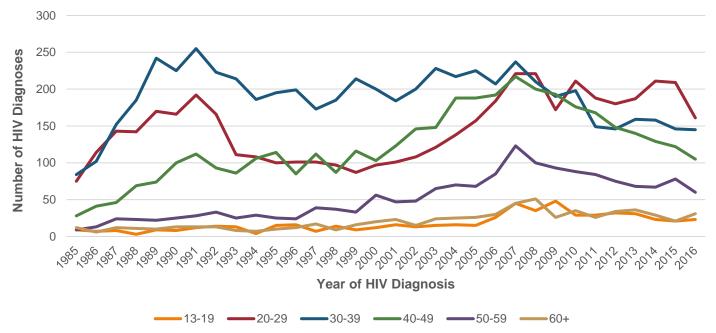
Non-Hispanic Other race not shown

_			Αc	DULT/ADOLESCEN	IT REPORTED	HIV DIAGNOSES							
YEAR OF		RACE/ETHNICITY											
HIV Diagnosis	No.	Hispar	nic	Non-Hispan only		Non-Hispani only		Non-Hispan Race					
		No.	%	No.	%	No.	%	No.	%				
<1985	110	2	1.8%	63	57.3%	42	38.2%	3	2.7%				
1985	217	9	4.1%	98	45.2%	99	45.6%	11	5.1%				
1986	283	12	4.2%	144	50.9%	122	43.1%	5	1.8%				
1987	385	13	3.4%	192	49.9%	176	45.7%	4	1.0%				
1988	433	29	6.7%	233	53.8%	160	37.0%	11	2.5%				
1989	527	17	3.2%	315	59.8%	185	35.1%	10	1.9%				
1990	537	19	3.5%	344	64.1%	160	29.8%	14	2.6%				
1991	612	34	5.6%	415	67.8%	151	24.7%	12	2.0%				
1992	542	38	7.0%	375	69.2%	118	21.8%	11	2.0%				
1993	457	29	6.3%	329	72.0%	87	19.0%	12	2.6%				
1994	440	26	5.9%	314	71.4%	88	20.0%	12	2.7%				
1995	459	24	5.2%	349	76.0%	74	16.1%	12	2.6%				
1996	437	29	6.6%	333	76.2%	57	13.0%	18	4.1%				
1997	449	25	5.6%	345	76.8%	70	15.6%	9	2.0%				
1998	429	22	5.1%	342	79.7%	51	11.9%	14	3.3%				
1999	475	32	6.7%	368	77.5%	53	11.2%	22	4.6%				
2000	488	37	7.6%	363	74.4%	62	12.7%	26	5.3%				
2001	494	35	7.1%	388	78.5%	46	9.3%	25	5.1%				
2002	530	31	5.8%	422	79.6%	44	8.3%	33	6.2%				
2003	601	47	7.8%	484	80.5%	43	7.2%	27	4.5%				
2004	654	35	5.4%	532	81.3%	56	8.6%	31	4.7%				
2005	679	49	7.2%	540	79.5%	54	8.0%	36	5.3%				
2006	724	68	9.4%	543	75.0%	77	10.6%	36	5.0%				
2007	888	90	10.1%	659	74.2%	97	10.9%	42	4.7%				
2008	817	93	11.4%	611	74.8%	65	8.0%	48	5.9%				
2009	722	67	9.3%	563	78.0%	51	7.1%	41	5.7%				
2010	737	68	9.2%	550	74.6%	76	10.3%	43	5.8%				
2011	644	77	12.0%	476	73.9%	57	8.9%	34	5.3%				
2012	615	57	9.3%	459	74.6%	52	8.5%	47	7.6%				
2013	621	56	9.0%	484	77.9%	50	8.1%	31	5.0%				
2014	617	75	12.2%	453	73.4%	58	9.4%	31	5.0%				
2015	597	73	12.2%	456	76.4%	39	6.5%	29	4.9%				
2016	525	48	9.1%	421	80.2%	37	7.0%	19	3.6%				
TOTAL	17,745	1,366	7.7%	12,963	73.1%	2,657	15.0%	759	4.3%				

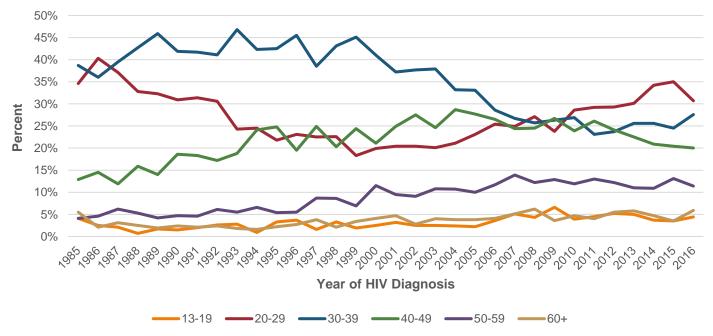
# Figure 5 – Trends in Adult/Adolescent Reported HIV Diagnoses by Age at Diagnosis, 1985-2016, Reported through 6/30/2017

Number and Percent by Age at HIV Diagnosis of Adult/Adolescent Reported HIV Cases, Age 13+ at HIV Diagnosis, with or without an AIDS Diagnosis (Adult/Adolescent Reported HIV Diagnoses) by Year of HIV Diagnosis from 1985 through 2016, as Reported through 6/30/2017





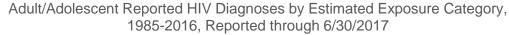
## Adult/Adolescent Reported HIV Diagnoses by Age at Diagnosis, 1985-2016, Reported through 6/30/2017

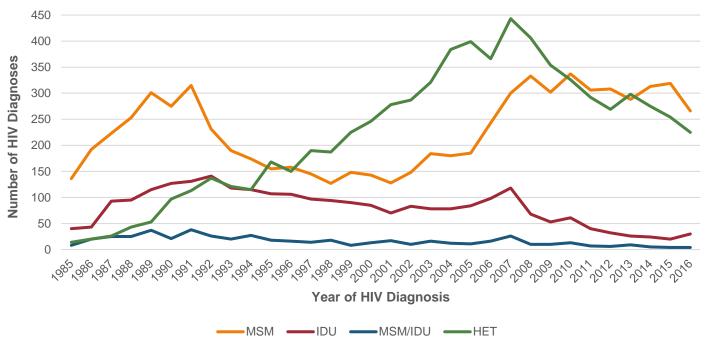


					ADULT/A	OLESCEN	T REPORT	ED <b>HIV D</b> I	AGNOSES				
YEAR OF HIV		AGE AT HIV DIAGNOSIS											
DIAGNOSIS	No.	Age 1	3-19	Age	Age 20-29		30-39	Age	40-49	Age	50-59	Age	60+
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
<1985	110	9	8.2%	40	36.4%	34	30.9%	20	18.2%	4	3.6%	3	2.7%
1985	217	9	4.1%	75	34.6%	84	38.7%	28	12.9%	9	4.1%	12	5.5%
1986	283	7	2.5%	114	40.3%	102	36.0%	41	14.5%	13	4.6%	6	2.1%
1987	385	8	2.1%	143	37.1%	152	39.5%	46	11.9%	24	6.2%	12	3.1%
1988	433	3	0.7%	142	32.8%	185	42.7%	69	15.9%	23	5.3%	11	2.5%
1989	527	9	1.7%	170	32.3%	242	45.9%	74	14.0%	22	4.2%	10	1.9%
1990	537	8	1.5%	166	30.9%	225	41.9%	100	18.6%	25	4.7%	13	2.4%
1991	612	12	2.0%	192	31.4%	255	41.7%	112	18.3%	28	4.6%	13	2.1%
1992	542	14	2.6%	166	30.6%	223	41.1%	93	17.2%	33	6.1%	13	2.4%
1993	457	13	2.8%	111	24.3%	214	46.8%	86	18.8%	25	5.5%	8	1.8%
1994	440	4	0.9%	108	24.5%	186	42.3%	106	24.1%	29	6.6%	7	1.6%
1995	459	15	3.3%	100	21.8%	195	42.5%	114	24.8%	25	5.4%	10	2.2%
1996	437	16	3.7%	101	23.1%	199	45.5%	85	19.5%	24	5.5%	12	2.7%
1997	449	7	1.6%	101	22.5%	173	38.5%	112	24.9%	39	8.7%	17	3.8%
1998	429	14	3.3%	97	22.6%	185	43.1%	87	20.3%	37	8.6%	9	2.1%
1999	475	9	1.9%	87	18.3%	214	45.1%	116	24.4%	33	6.9%	16	3.4%
2000	488	12	2.5%	97	19.9%	200	41.0%	103	21.1%	56	11.5%	20	4.1%
2001	494	16	3.2%	101	20.4%	184	37.2%	123	24.9%	47	9.5%	23	4.7%
2002	530	13	2.5%	108	20.4%	200	37.7%	146	27.5%	48	9.1%	15	2.8%
2003	601	15	2.5%	121	20.1%	228	37.9%	148	24.6%	65	10.8%	24	4.0%
2004	654	16	2.4%	138	21.1%	217	33.2%	188	28.7%	70	10.7%	25	3.8%
2005	679	15	2.2%	157	23.1%	225	33.1%	188	27.7%	68	10.0%	26	3.8%
2006	724	26	3.6%	184	25.4%	207	28.6%	192	26.5%	85	11.7%	30	4.1%
2007	888	45	5.1%	221	24.9%	237	26.7%	217	24.4%	123	13.9%	45	5.1%
2008	817	35	4.3%	221	27.1%	210	25.7%	200	24.5%	100	12.2%	51	6.2%
2009	722	48	6.6%	172	23.8%	190	26.3%	193	26.7%	93	12.9%	26	3.6%
2010	737	29	3.9%	211	28.6%	198	26.9%	176	23.9%	88	11.9%	35	4.7%
2011	644	29	4.5%	188	29.2%	149	23.1%	168	26.1%	84	13.0%	26	4.0%
2012	615	32	5.2%	180	29.3%	146	23.7%	148	24.1%	75	12.2%	34	5.5%
2013	621	31	5.0%	187	30.1%	159	25.6%	140	22.5%	68	11.0%	36	5.8%
2014	617	23	3.7%	211	34.2%	158	25.6%	129	20.9%	67	10.9%	29	4.7%
2015	597	21	3.5%	209	35.0%	146	24.5%	122	20.4%	78	13.1%	21	3.5%
2016	525	23	4.4%	161	30.7%	145	27.6%	105	20.0%	60	11.4%	31	5.9%
TOTAL	17,745	586	3.3%	4,780	26.9%	6,067	34.2%	3,975	22.4%	1,668	9.4%	669	3.8%

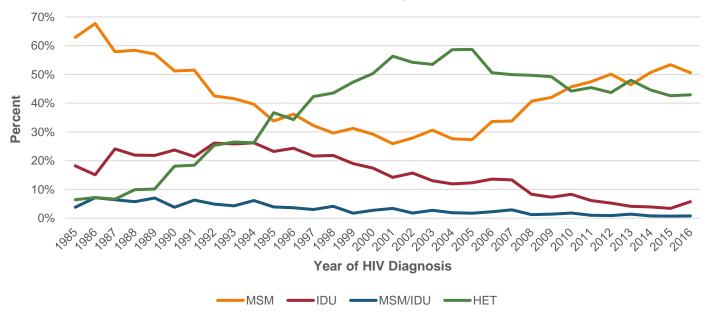
# Figure 6 – Trends in Adult/Adolescent Reported HIV Diagnoses by Estimated Exposure Category, 1985-2016, Reported through 6/30/2017

Number and Percent by Estimated Exposure Category§ of Adult/Adolescent Reported HIV Cases, Age 13+ at HIV Diagnosis, with or without an AIDS Diagnosis (Adult/Adolescent Reported HIV Diagnoses) by Year of HIV Diagnosis from 1985 through 2016, as Reported through 6/30/2017





Adult/Adolescent Reported HIV Diagnoses by Estimated Exposure Category, 1985-2016, Reported through 6/30/2017



Other Exposure Category not shown

§ Multiple imputation was used to estimate and adjust for missing transmission category.

V					ADULT/AD	OLESCENT I	REPORTED	HIV DIAGN	IOSES			
YEAR OF -		% with No				ESTIMA	TED EXPOS	URE CATE	GORY§			
DIAGNOSIS	No.**	Reported	MS	SM .	ID	U	MSM/	'IDU	HE	T	Other Ex	posure
DIAGNOSIS		Exposure*	No.	%	No.	%	No.	%	No.	%	No.	%
<1985	110	10.9%	75	67.8%	19	16.9%	6	5.0%	8	7.5%	3	2.7%
1985	217	6.9%	136	62.9%	40	18.2%	8	3.8%	14	6.4%	19	8.8%
1986	283	4.2%	192	67.7%	43	15.1%	20	7.1%	20	7.2%	8	2.8%
1987	385	4.9%	223	57.9%	93	24.1%	25	6.4%	26	6.6%	19	4.9%
1988	433	6.5%	253	58.4%	95	21.9%	25	5.7%	43	9.9%	18	4.2%
1989	527	7.4%	301	57.1%	115	21.8%	37	7.0%	53	10.1%	21	4.0%
1990	537	5.6%	275	51.2%	127	23.7%	21	3.8%	97	18.1%	17	3.2%
1991	612	8.0%	315	51.5%	131	21.4%	38	6.3%	113	18.4%	15	2.5%
1992	542	12.4%	231	42.5%	141	26.1%	26	4.9%	137	25.3%	7	1.3%
1993	457	10.5%	190	41.6%	118	25.8%	20	4.3%	121	26.5%	8	1.8%
1994	440	10.2%	174	39.6%	115	26.2%	27	6.1%	115	26.2%	8	1.8%
1995	459	12.9%	155	33.8%	107	23.2%	18	3.9%	168	36.7%	11	2.4%
1996	437	16.7%	158	36.2%	106	24.3%	16	3.6%	150	34.3%	7	1.6%
1997	449	15.4%	145	32.2%	97	21.6%	14	3.0%	190	42.3%	4	0.9%
1998	429	17.2%	127	29.6%	94	21.8%	18	4.1%	187	43.5%	4	0.9%
1999	475	18.1%	148	31.2%	90	19.0%	8	1.7%	225	47.3%	4	0.8%
2000	488	19.5%	143	29.2%	85	17.4%	13	2.7%	246	50.3%	2	0.4%
2001	494	19.4%	128	25.9%	70	14.2%	17	3.4%	278	56.3%	1	0.2%
2002	530	16.4%	148	27.9%	83	15.7%	10	1.8%	287	54.2%	2	0.4%
2003	601	15.0%	184	30.6%	78	13.0%	16	2.7%	321	53.5%	1	0.2%
2004	654	20.2%	180	27.6%	78	11.9%	12	1.9%	384	58.6%	0	0.0%
2005	679	24.0%	185	27.3%	84	12.3%	11	1.7%	399	58.7%	0	0.0%
2006	724	29.6%	243	33.6%	98	13.6%	16	2.2%	366	50.6%	0	0.0%
2007	888	34.0%	300	33.8%	118	13.3%	26	2.9%	443	49.9%	2	0.2%
2008	817	41.4%	333	40.7%	68	8.3%	10	1.2%	406	49.7%	1	0.1%
2009	722	43.9%	302	42.0%	53	7.3%	10	1.4%	354	49.2%	0	0.0%
2010	737	44.9%	337	45.7%	61	8.3%	13	1.8%	326	44.2%	0	0.0%
2011	644	46.0%	306	47.5%	40	6.1%	7	1.0%	292	45.4%	0	0.0%
2012	615	32.0%	308	50.1%	32	5.2%	6	0.9%	269	43.7%	0	0.0%
2013	621	26.9%	288	46.4%	26	4.1%	9	1.4%	298	48.0%	0	0.0%
2014	617	24.5%	313	50.7%	24	3.9%	5	0.8%	275	44.6%	0	0.0%
2015	597	22.6%	319	53.4%	20	3.4%	4	0.7%	254	42.6%	0	0.0%
2016	525	41.1%	266	50.6%	30	5.7%	4	0.8%	225	42.9%	0	0.0%
TOTAL	17,745	22.8%	7,379	41.6%	2,577	14.5%	513	2.9%	7,090	40.0%	182	1.0%

<sup>§</sup> Multiple imputation was used to estimate and adjust for missing transmission category.

<sup>\*</sup>Percent with no reported exposure prior to multiple imputation adjustment.

<sup>\*\*</sup> Discrepancies in the table between total HIV diagnoses and the sums by exposure category are due to less than 1% of cases missing transmission category after multiple imputation.

### Section III – Adult/Adolescent Cases by Jurisdiction

Table 1 – Adult/Adolescent HIV Diagnoses during 2016, Linked to Care, Late Diagnosis, and First CD4 Test Result by Jurisdiction of Residence at HIV Diagnosis, Reported through 6/30/2017

		ADULT/ADOLESCENT REPORTED HIV DIAGNOSES										
JURISDICTION OF RESIDENCE AT HIV DIAGNOSIS	POPULATION AGE 13+	No.	% of	Dete	Linked to Care		Late HIV Diagnoses	First CD4 Test Result				
	AGE 101	NO.	Total	Rate -	% 1 mo.	% 3 mo.	%	%	Median Count			
Calvert	76,619	8	1.5%	10.4	***	***	***	***	***			
Charles	131,050	22	4.2%	16.8	81.8%	90.9%	27.3%	95.5%	325			
Frederick	206,845	17	3.2%	8.2	***	***	***	***	***			
Montgomery	868,044	150	28.6%	17.3	78.7%	84.7%	24.0%	86.7%	354			
Prince George's	757,629	328	62.5%	43.3	79.6%	85.4%	26.2%	87.2%	378			
TOTAL	2,040,188	525	100.0%	25.7	79.2%	85.7%	24.8%	87.4%	374			

<sup>\*\*\*</sup> Data withheld due to low population counts and/or case counts

Jurisdiction of Residence at HIV Diagnosis: Jurisdiction of residence at time of initial HIV diagnosis.

**Population Age 13+:** Population age 13 years or older, estimate for 7/1/2016.

**Adult/Adolescent Reported HIV Diagnoses:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial HIV diagnosis during the specified year.

Rate: Number of adult/adolescent HIV diagnoses divided by the population age 13 years or older and multiplied by 100,000.

**Linked to Care:** Percent of adult/adolescent reported HIV diagnoses with a reported CD4 or viral load test performed less than or equal to 1 month or 3 months after their initial HIV diagnosis.

**Late HIV Diagnosis:** Percent of adult/adolescent reported HIV diagnoses with an initial AIDS diagnosis less than or equal to 12 months after their initial HIV diagnosis.

**First CD4 Test Result Percent:** Percent of adult/adolescent reported HIV diagnoses with the first CD4 test result reported within 12 months following the initial HIV diagnosis.

**First CD4 Test Result Median Count:** Median CD4 count (cells per microliter) of the first CD4 test result reported within 12 months following initial HIV diagnosis.

Table 2 – Adult/Adolescent AIDS Diagnoses during 2016, Mean Years from HIV Diagnosis and Percent Late HIV Diagnosis, by Jurisdiction of Residence at AIDS Diagnosis, Reported through 6/30/2017

		ADULT/ADOLESCENT REPORTED AIDS DIAGNOSES									
JURISDICTION OF RESIDENCE AT AIDS DIAGNOSIS	Population AGE 13+	No.	% of Total	Rate	Mean Years from HIV Diagnosis	% Late HIV Diagnosis					
Calvert	76,619	2	0.8%	2.6	***	***					
Charles	131,050	12	4.9%	9.2	2.2	66.7%					
Frederick	206,845	3	1.2%	1.5	***	***					
Montgomery	868,044	63	25.5%	7.3	3.0	57.1%					
Prince George's	757,629	167	67.6%	22.0	4.2	50.9%					
TOTAL	2,040,188	247	100.0%	12.1	3.8	53.0%					

<sup>\*\*\*</sup> Data withheld due to low population counts and/or case counts

Jurisdiction of Residence at AIDS Diagnosis: Jurisdiction of residence at time of initial AIDS diagnosis.

**Population Age 13+:** Population age 13 years or older, estimate for 7/1/2016.

**Adult/Adolescent Reported AIDS Diagnoses:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial AIDS diagnosis during the specified year.

Rate: Number of adult/adolescent AIDS diagnoses divided by the population age 13 years or older and multiplied by 100,000.

**Mean Years from HIV Diagnosis:** Mean number of years from initial HIV diagnosis to initial AIDS diagnosis for cases with a reported AIDS diagnosis.

**Percent Late HIV Diagnosis:** Percent of adult/adolescent reported AIDS diagnoses with an initial HIV diagnosis less than or equal to 12 months prior to their initial AIDS diagnosis.

Table 3 – Adult/Adolescent HIV Cases Alive on 12/31/2016, by Jurisdiction of Residence at Diagnosis, Reported through 6/30/2017

JURISDICTION OF RESIDENCE AT	POPULATION AGE 13+	ADULT/ADOLESCENT LIVING HIV CASES WITHOUT AIDS		ADULT/ADOLESCENT LIVING HIV CASES WITH AIDS			ADULT/ADOLESCENT TOTAL LIVING HIV CASES				
Diagnosis	AGE 13+	No.	% of Total	Rate	No.	% of Total	Rate	No.	% of Total	Rate	Ratio (1 in X)
Calvert	76,619	55	0.9%	71.8	53	0.9%	69.2	108	0.9%	141.0	709
Charles	131,050	234	4.0%	178.6	191	3.1%	145.7	425	3.6%	324.3	308
Frederick	206,845	176	3.0%	85.1	152	2.5%	73.5	328	2.7%	158.6	630
Montgomery	868,044	1,818	30.9%	209.4	1,981	32.7%	228.2	3,799	31.8%	437.7	228
Prince George's	757,629	3,605	61.2%	475.8	3,688	60.8%	486.8	7,293	61.0%	962.6	103
TOTAL	2,040,188	5,888	100.0%	288.6	6,065	100.0%	297.3	11,953	100.0%	585.9	170

**Jurisdiction of Residence at Diagnosis:** Jurisdiction of residence at later time of initial HIV diagnosis or time of initial AIDS diagnosis.

Population Age 13+: Population greater than or equal to 13 years old, estimate for 7/1/2016.

**Adult/Adolescent Living HIV Cases without AIDS:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

**Adult/Adolescent Living HIV Cases with AIDS:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year.

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

Rate: Number of adult/adolescent cases divided by the population age 13 years or older multiplied by 100,000.

Ratio (1 in X): Number of people for every 1 living HIV case in the population, or 1 living HIV case in every X number of people.

Table 4 – Adult/Adolescent HIV Cases Alive on 12/31/2016, by Jurisdiction of Residence at Diagnosis or Current Residence, Reported through 6/30/2017

		Adult/Adolescent Total Living HIV Cases									
JURISDICTION OF	POPULATION	Residence at Diagnosis					%				
RESIDENCE	Age 13+	No.	% of Total	Rate	Ratio (1 in X)	No.	% of Total	Rate	Ratio (1 in X)	Change	
Calvert	76,619	108	0.9%	141.0	709	130	1.1%	169.7	589	20.4%	
Charles	131,050	425	3.6%	324.3	308	491	4.2%	374.7	266	15.5%	
Frederick	206,845	328	2.7%	158.6	630	374	3.2%	180.8	553	14.0%	
Montgomery	868,044	3,799	31.8%	437.7	228	3,219	27.5%	370.8	269	-15.3%	
Prince George's	757,629	7,293	61.0%	962.6	103	7,500	64.0%	989.9	101	2.8%	
TOTAL	2,040,188	11,953	100.0%	585.9	170	11,714	100.0%	574.2	174	-2.0%	

Jurisdiction of Residence: Jurisdiction of residence at diagnosis or current residence.

**Population Age 13+:** Population age 13 years or older, estimate for 7/1/2016.

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

Residence at Diagnosis: Jurisdiction of residence at later time of initial HIV diagnosis or initial AIDS diagnosis.

**Current Residence:** Jurisdiction of residence from the most recent report since 1/1/2009.

Rate: Number of adult/adolescent cases divided by the population age 13 years or older multiplied by 100,000.

Ratio (1 in X): Number of people for every 1 living HIV case in the population, or 1 living HIV case in every X number of people.

**Percent Change:** The percent change in number of adult/adolescent total living HIV cases from residence at diagnosis to current residence.

Table 5 – CD4 Test Results during 2016 for Adult/Adolescent HIV Cases Alive on 12/31/2016, by Jurisdiction of Current Residence, Reported through 6/30/2017

			ADULT/A	DOLESCENT TO	TAL LIVING HI	V CASES					
JURISDICTION OF CURRENT		Recent CD4 Test Result									
RESIDENCE	No.	No. with Test	% with Test	Median Count	<200	200-349	350-499	500+			
Calvert	130	101	77.7%	686	8.9%	8.9%	14.9%	67.3%			
Charles	491	344	70.1%	584	12.5%	13.7%	16.3%	57.6%			
Frederick	374	259	69.3%	599	3.1%	13.5%	15.1%	68.3%			
Montgomery	3,219	2,184	67.8%	561	7.6%	14.6%	20.2%	57.6%			
Prince George's	7,500	5,118	68.2%	549	10.9%	13.6%	19.0%	56.5%			
Total	11,714	8,006	68.3%	558	9.8%	13.8%	19.1%	57.3%			

Jurisdiction of Current Residence: Jurisdiction of residence from the most recent report since 1/1/2009.

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

Recent CD4 Test Result: The most recent CD4 test result measured in the specified year.

With Test: Number and percent of adult/adolescent total living HIV cases with a recent CD4 test result.

**Median Count:** Median CD4 count (cells per microliter), among adult/adolescent total living HIV cases, of the most recent CD4 test result measured in the specified year.

**CD4 Result Distribution (<200, 200-349, 350-499, 500+):** Percent of adult/adolescent living HIV cases with a recent CD4 test result distributed by the CD4 count results (cells per microliter).

Table 6 – Viral Load Test Results during 2016 for Adult/Adolescent HIV Cases Alive on 12/31/2016, by Jurisdiction of Current Residence, Reported through 6/30/2017

	ADULT/ADOLESCENT TOTAL LIVING HIV CASES									
JURISDICTION OF CURRENT RESIDENCE		Recent Viral Load Test Result								
CONTROL OF CONTROL OF THE CONTROL OF	No.	No. with Test	% with Test	% Suppressed	Median Unsuppressed					
Calvert	130	104	80.0%	88.5%	12,646					
Charles	491	357	72.7%	78.2%	11,154					
Frederick	374	263	70.3%	90.9%	26,470					
Montgomery	3,219	2,182	67.8%	88.9%	8,160					
Prince George's	7,500	5,129	68.4%	81.7%	11,740					
TOTAL	11,714	8,035	68.6%	83.8%	11,267					

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

Jurisdiction of Current Residence: Jurisdiction of residence from the most recent report since 1/1/2009.

Recent Viral Load Test Result: The most recent viral load test result measured in the specified year.

With Test: Number and percent of adult/adolescent total living HIV cases with a recent viral load test result.

**Percent Suppressed:** Percent of adult/adolescent total living HIV cases with a recent viral load test result measured in the specified year of less than 200 copies per milliliter.

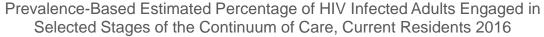
**Median Unsuppressed:** Median unsuppressed viral load (copies per milliliter) among adult/adolescent total living HIV cases with the most recent viral load test result measured in the specified year of 200 copies per milliliter or greater.

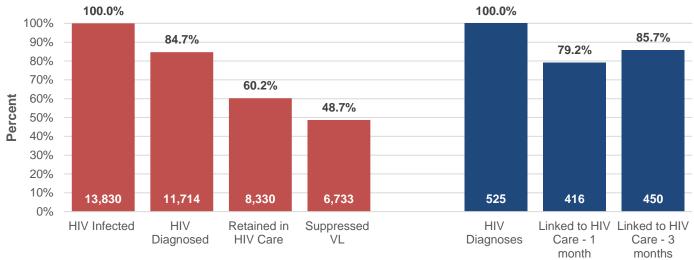
### Section IV – Continuum of Care Cascades

In their 2011 article in Clinical Infectious Diseases, Gardner et al.<sup>1</sup> utilize a continuum of care "cascade" to illustrate estimates of the number of persons living with HIV who belong to each of the stages of engagement in HIV care.

# Figure 7 – Prevalence-Based Estimated Adult/Adolescent 2016 HIV Continuum of Care Cascades, Current Washington Metro Residents, Reported through 6/30/2017

The prevalence-based Washington Metro Engagement in HIV Care Cascade (below) uses the most recent Centers for Disease Control and Prevention (CDC) estimate of the number of undiagnosed persons in Maryland (15.3%)<sup>2</sup> to generate an estimated number of HIV infected persons currently residing in the Washington Metro area. It then uses Maryland surveillance data to describe the number and percentage of persons living with HIV in the Washington Metro area on 12/31/2016 and the number and percentage of new HIV diagnoses in 2016 who belong to each of the stages of engagement in HIV care.





**Engagement in HIV Care** 

Continuum of Care Stage	Living F	HIV Cases	Continuum of Care Stage	New Diagnoses		
Continuum of Care Stage	Number	Percentage	Continuum of Care Stage	Number	Percentage	
HIV Infected	13,830	100.0%	New HIV Diagnoses	525	100.0%	
HIV Diagnosed	11,714	84.7%	Linked to HIV Care – 1 Month	416	79.2%	
Retained in HIV Care	8,330	60.2%	Linked to HIV Care – 3 Months	450	85.7%	
Suppressed VL	6,733	48.7%				

**HIV Infected:** HIV Diagnosed divided by one minus the estimate of undiagnosed HIV infections (15.3%) in Maryland.

HIV Diagnosed: Adult/adolescent total living HIV cases as of December 31st of the specified year.

**Retained in HIV Care:** HIV Diagnosed with a reported CD4 or viral load test result performed during the specified year. **Suppressed Viral Load:** HIV Diagnosed with the most recent viral load measured in the specified year of less than 200 copies per milliliter.

**New HIV Diagnoses:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial HIV diagnosis during the specified year.

**Linked to HIV Care – 1 month:** Adult/adolescent reported HIV diagnoses with a reported CD4 or viral load test performed less than or equal to 1 month after their initial HIV diagnosis.

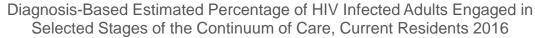
**Linked to HIV Care – 3 months:** Number of adult/adolescent reported HIV diagnoses with a reported CD4 or viral load test performed less than or equal to 3 months after their initial HIV diagnosis.

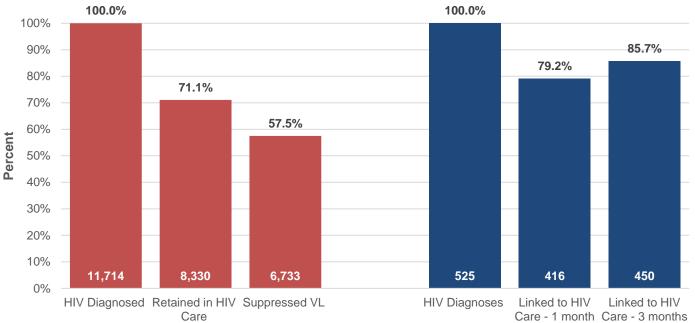
<sup>&</sup>lt;sup>1</sup> Gardner et al, "The Spectrum of Engagement in HIV Care and its Relevance to Test-and-Treat Strategies for Prevention of HIV Infection." Clin Infect Dis. 2011; 52 (6): 793-800.

<sup>&</sup>lt;sup>2</sup>Centers for Disease Control and Prevention. Monitoring selected national HIV prevention and care objectives by using HIV surveillance data—United States and 6 dependent areas, 2015. HIV Surveillance Supplemental Report 2017;22(No. 2). http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html. Published July 2017.

# Figure 8 – Diagnosis-Based Estimated Adult/Adolescent 2016 HIV Continuum of Care Cascades, Current Washington Metro Residents, Reported through 6/30/2017

The diagnosis-based Washington Mero Engagement in HIV Care Cascade (below) uses Maryland surveillance data for current Washington Mero area residents to describe the number and percentage of persons living with HIV in the Washington Metro area on 12/31/2016 and the number and percentage of new HIV diagnoses in 2016 who belong to each of the stages of engagement in HIV care.





**Engagement in HIV Care** 

Continuum of Care Stage	Living I	HV Cases	Continuum of Care Stage	New Diagnoses		
Continuum of Care Stage	Number	Percentage	Continuum of Care Stage	Number	Percentage	
HIV Diagnosed	11,714	100.0%	New HIV Diagnoses	525	100.0%	
Retained in HIV Care	8,330	71.1%	Linked to HIV Care – 1 Month	416	79.2%	
Suppressed VL	6,733	57.5%	Linked to HIV Care – 3 Months	450	85.7%	

**HIV Diagnosed:** Adult/adolescent total living HIV cases as of December 31<sup>st</sup> of the specified year with a recent address in Maryland between 2009 and 2016.

**Retained in HIV Care:** HIV Diagnosed with a reported CD4 or viral load test result performed during the specified year. **Suppressed Viral Load:** HIV Diagnosed with the most recent viral load measured in the specified year of less than 200 copies per milliliter.

**New HIV Diagnoses:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial HIV diagnosis during the specified year.

**Linked to HIV Care – 1 month:** Adult/adolescent reported HIV diagnoses with a reported CD4 or viral load test performed less than or equal to 1 month after their initial HIV diagnosis.

**Linked to HIV Care – 3 months:** Number of adult/adolescent reported HIV diagnoses with a reported CD4 or viral load test performed less than or equal to 3 months after their initial HIV diagnosis.

### Section V – Cases by Age

Table 7 – HIV Diagnoses during 2016, Linked to Care, Late Diagnosis, and First CD4 Test Result by Age at HIV Diagnosis, Reported through 6/30/2017

					REPORTED HI	V Diagnos	ES		
AGE AT HIV DIAGNOSIS	POPULATION	No.	% of	Rate	Linked to Care		Late HIV Diagnoses	First CD4 Test Result	
DIAGNOSIS		NO.	Total	Rate	% 1 mo.	% 3 mo.	%	%	Median Count
<5 (Pediatric)	156.068	2	0.4%	1.3	***	3 IIIO. ***	***	***	***
5-12 (Pediatric)	252,203	1	0.4%	0.4	***	***	***	***	***
13-19	220,775	23	4.4%	10.4	95.7%	100.0%	***	91.3%	456
20-29	320,060	161	30.5%	50.3	78.9%	85.1%	11.2%	87.6%	421
30-39	335,733	145	27.5%	43.2	75.9%	83.4%	30.3%	86.9%	352
40-49	336,033	105	19.9%	31.2	82.9%	89.5%	30.5%	88.6%	335
50-59	354,930	60	11.4%	16.9	73.3%	78.3%	31.7%	83.3%	392
60+	472,657	31	5.9%	6.6	83.9%	90.3%	51.6%	90.3%	183
TOTAL	2,448,459	528	100.0%	21.6	79.4%	85.8%	24.6%	87.3%	377

<sup>\*\*\*</sup> Data withheld due to low population counts and/or case counts

Age at HIV Diagnosis: Age group at time of initial HIV diagnosis.

**Population:** Population estimate for 7/1/2016.

Reported HIV Diagnoses: Reported HIV diagnoses with an initial HIV diagnosis during the specified year.

Rate: Number of HIV diagnoses divided by the population age 13 years or older and multiplied by 100,000.

**Linked to Care:** Percent of reported HIV diagnoses with a reported CD4 or viral load test performed less than or equal to 1 month or 3 months after their initial HIV diagnosis.

Late HIV Diagnosis: Percent of reported HIV diagnoses with an initial AIDS diagnosis less than or equal to 12 months after their initial HIV diagnosis.

**First CD4 Test Result Percent:** Percent of reported HIV diagnoses with the first CD4 test result reported within 12 months following the initial HIV diagnosis.

**First CD4 Test Result Median Count:** Median CD4 count (cells per microliter) of the first CD4 test result reported within 12 months following initial HIV diagnosis.

Table 8 – HIV Cases Alive on 12/31/2016, by Age on 12/31/2016, Reported through 6/30/2017

Age On			To	OTAL LIVING HIV CASE	ES	
12/31/2016	Population	No.	% of Total	% Living with AIDS	Rate	Ratio (1 in X)
<5	156,068	5	0.0%	0.0%	3.2	31,213
5-12	252,203	30	0.3%	13.3%	11.9	8,406
13-19	220,775	91	0.8%	24.2%	41.2	2,426
20-29	320,060	1,432	12.1%	25.8%	447.4	223
30-39	335,733	2,565	21.6%	40.4%	764.0	130
40-49	336,033	3,135	26.4%	56.3%	932.9	107
50-59	354,930	3,091	26.0%	60.3%	870.9	114
60+	472,657	1,529	12.9%	61.2%	323.5	309
TOTAL	2,448,459	11,878	100.0%	50.5%	485.1	206

**Age on [date]:** Age group of living cases on the specified date.

**Population:** Population estimate for 7/1/2016.

**Total Living HIV Cases:** Reported HIV diagnoses with or without an AIDS diagnosis and not reported to have died as of December 31<sup>st</sup> of the specified year.

**Percent Living with AIDS:** The percent of reported HIV diagnoses with an AIDS diagnosis not reported to have died as of December 31<sup>st</sup> of the specified year.

Rate: Number of HIV cases divided by the population multiplied by 100,000.

Ratio (1 in X): Number of people for every 1 living HIV case in the population, or 1 living HIV case in every X number of people.

Table 9 – CD4 Test Results during 2016 for Adult/Adolescent HIV Cases Alive on 12/31/2016, by Age on 12/31/2016, Reported through 6/30/2017

		ADULT/ADOLESCENT TOTAL LIVING HIV CASES										
AGE ON			Recent CD4 Test Results									
12/31/2016	No.	No. with Test	% with Test	Median Count	<200	200-349	350-499	500+				
13-19	45	39	86.7%	563	2.6%	7.7%	35.9%	53.8%				
20-29	1,359	898	66.1%	582	8.1%	11.8%	17.0%	63.0%				
30-39	2,556	1,661	65.0%	562	10.6%	12.8%	18.4%	58.2%				
40-49	3,134	2,099	67.0%	545	11.5%	14.0%	19.2%	55.3%				
50-59	3,091	2,202	71.2%	563	8.5%	15.1%	18.9%	57.5%				
60+	1,529	1,107	72.4%	538	9.6%	14.2%	21.1%	55.1%				
TOTAL	11,714	8,006	68.3%	558	9.8%	13.8%	19.1%	57.3%				

Table 10 – Viral Load Test Results during 2016 for Adult/Adolescent HIV Cases Alive on 12/31/2016, by Age on 12/31/2016, Reported through 6/30/2017

		Adult/Ado	DLESCENT TOTAL LIVING I	HIV CASES							
AGE ON			Recent Viral Load Test Result								
12/31/2016	No.	No. with Test	% with Test	% Suppressed	Median Unsuppressed						
13-19	45	40	88.9%	50.0%	16,368						
20-29	1,359	922	67.8%	73.2%	12,500						
30-39	2,556	1,689	66.1%	80.6%	12,510						
40-49	3,134	2,117	67.5%	85.0%	10,715						
50-59	3,091	2,193	70.9%	86.9%	10,017						
60+	1,529	1,074	70.2%	90.8%	6,607						
TOTAL	11,714	8,035	68.6%	83.8%	11,267						

**Age on [date]:** Age group of living cases on the specified date.

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

Recent CD4 Test Result: The most recent CD4 test result measured in the specified year.

CD4 With Test: Number and percent of adult/adolescent total living HIV cases with a recent CD4 test result.

**Median Count:** Median CD4 count (cells per microliter), among adult/adolescent total living HIV cases, of the most recent CD4 test result measured in the specified year.

**CD4 Result Distribution (<200, 200-349, 350-499, 500+):** Percent of adult/adolescent living HIV cases with a recent CD4 test result distributed by the CD4 count results (cells per microliter).

Recent Viral Load Test Result: The most recent viral load test result measured in the specified year.

Viral Load With Test: Number and percent of adult/adolescent total living HIV cases with a recent viral load test result.

**Percent Suppressed:** Percent of adult/adolescent total living HIV cases with a recent viral load test result measured in the specified year of less than 200 copies per milliliter.

**Median Unsuppressed:** Median unsuppressed viral load (copies per milliliter) among adult/adolescent total living HIV cases with the most recent viral load test result measured in the specified year of 200 copies per milliliter or greater.

### Section VI – Adult/Adolescent Cases by Demographics

Table 11 – Adult/Adolescent HIV Diagnoses during 2016, Linked to Care, Late Diagnosis, and First CD4 Test Result by Sex at Birth, Race/Ethnicity, and Country of Birth, Reported through 6/30/2017

		ADULT/ADOLESCENT REPORTED HIV DIAGNOSES									
SEV AT RIDTU	POPULATION AGE 13+*	No.	% of	Rate	Linked to Care		Late HIV Diagnoses	First CD4 T	est Result		
	AGE 13T	NO.	Total	Nate	% 1 mo.	% 3 mo.	%	%	Median Count		
Male	974,945	358	68.2%	36.7	81.3%	86.3%	23.7%	88.3%	376		
Female	1,065,242	167	31.8%	15.7	74.9%	84.4%	26.9%	85.6%	370		
TOTAL	2,040,188	525	100.0%	25.7	79.2%	85.7%	24.8%	87.4%	374		

				ADULT/ADO	DLESCENT REF	PORTED HIV	DIAGNOSES		
RACE/ETHNICITY	POPULATION AGE 13+*	No.	% of	Rate	Linked t	to Care	Late HIV Diagnoses	First CD4 Test Result	
	702 101	NO.	Total	Nate	% 1 mo.	% 3 mo.	%	%	Median Count
Hispanic	296,719	48	9.1%	16.2	89.6%	91.7%	18.8%	91.7%	401
Non-Hispanic	1,743,469	477	90.9%	27.4	78.2%	85.1%	25.4%	87.0%	370
American Indian/Alaska Native, only	4,957	0	0.0%	0.0					
Asian, only	185,331	9	1.7%	4.9	77.8%	77.8%	***	66.7%	376
Black, only	723,574	421	80.2%	58.2	79.1%	86.0%	25.7%	87.9%	366
Native Hawaiian/ Other Pacific Islander, only	987	0	0.0%	0.0					
White, only	789,405	37	7.0%	4.7	64.9%	73.0%	18.9%	78.4%	438
Multiracial/ Other	39,215	10	1.9%	25.5	90.0%	100.0%	***	100.0%	267
TOTAL	2,040,188	525	100.0%	25.7	79.2%	85.7%	24.8%	87.4%	374

				Adult/Add	DLESCENT RE	PORTED HIV	DIAGNOSES			
COUNTRY OF BIRTH	Population Age 13+*	No.	% of	Rate -	Linked to Care		Linked to Care Late HIV Diagnoses		First CD4 Test Result	
	AGE 104	NO.	Total	Nate	% 1 mo.	% 3 mo.	%	%	Median Count	
United States	1,457,398	401	76.4%	27.5	78.6%	85.0%	24.7%	86.0%	370	
Foreign-born	531,472	91	17.3%	17.1	81.3%	89.0%	24.2%	92.3%	451	
Africa		65	71.4%		76.9%	84.6%	23.1%	89.2%	418	
Asia		4	4.4%		***	***	***	***	***	
Caribbean		6	6.6%		***	***	***	***	***	
Central America		7	7.7%		85.7%	100.0%	***	100.0%	510	
Other		9	9.9%		88.9%	100.0%	***	100.0%	593	
Unknown		33	6.3%		81.8%	84.8%	27.3%	90.9%	327	
TOTAL	1,988,871	525	100.0%	26.4	79.2%	85.7%	24.8%	87.4%	374	

<sup>\*</sup> Population data by sex at birth, age, and race/ethnicity are from the 2016 U.S. Census population estimates

**Population Age 13+:** Population greater than or equal to 13 years old, estimate for 7/1/2016.

<sup>\*\*</sup> Population data by country of birth are from the 2015 American Community Survey

<sup>\*\*\*</sup> Data withheld due to low population and/or case counts

**Adult/Adolescent Reported HIV Diagnoses:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial HIV diagnosis during the specified year.

Rate: Number of adult/adolescent HIV diagnoses divided by the population age 13 years or older and multiplied by 100.000.

**Linked to Care:** Percent of adult/adolescent reported HIV diagnoses with a reported CD4 or viral load test performed less than or equal to 1 month or 3 months after their initial HIV diagnosis.

**Late HIV Diagnosis:** Percent of adult/adolescent reported HIV diagnoses with an initial AIDS diagnosis less than or equal to 12 months after their initial HIV diagnosis.

First CD4 Test Result Percent: Percent of adult/adolescent reported HIV diagnoses with the first CD4 test result reported within 12 months following the initial HIV diagnosis.

**First CD4 Test Result Median Count:** Median CD4 count (cells per microliter) of the first CD4 test result reported within 12 months following initial HIV diagnosis.

Table 12 – Adult/Adolescent Living HIV Cases Alive on 12/31/2016, by Sex at Birth, Race/Ethnicity, and Country of Birth, Reported through 6/30/2017

	POPULATION		ADULT/ADO	LESCENT TOTAL LIVING	HIV CASES					
SEX AT BIRTH	AGE 13+	No.	% of Total	% Living with AIDS	Rate	Ratio (1 in X)				
Male	974,945	7,745	66.1%	49.9%	794.4	125				
Female	1,065,242	3,969	33.9%	52.0%	372.6	268				
TOTAL	2,040,188	11,714	100.0%	50.6%	574.2	174				

	POPULATION		ADULT/ADO	LESCENT TOTAL LIVING	HIV CASES				
RACE/ETHNICITY	AGE 13+*	No.	% of Total	% Living with AIDS	Rate	Ratio (1 in X)			
Hispanic	296,719	1,069	9.1%	54.1%	360.3	277			
Non-Hispanic	1,743,469	10,645	90.9%	50.3%	610.6	163			
American Indian/Alaska Native, only	4,957	***	***	***	***	***			
Asian, only	185,331	102	0.9%	36.3%	55.0	1,816			
Black, only	723,574	8,828	75.4%	50.8%	1,220.1	81			
Native Hawaiian/ Other Pacific Islander, only	987	***	***	***	***	***			
White, only	789,405	1,137	9.7%	44.5%	144.0	694			
Multiracial/ Other	39,215	569	4.9%	55.9%	1,451.0	68			
TOTAL	2,040,188	11,714	100.0%	50.6%	574.2	174			

Country Of	POPULATION .	Adult/Adolescent Total Living HIV Cases					
BIRTH	AGE 13+**	No.	% of Total	% Living with AIDS	Rate	Ratio (1 in X)	
United States	1,457,398	9,371	80.0%	50.2%	643.0	155	
Foreign-born	531,472	1,947	16.6%	55.9%	366.3	272	
Africa		1,278	10.9%	55.6%			
Asia		77	0.7%	42.9%			
Caribbean		120	1.0%	50.8%			
Central America		320	2.7%	65.0%			
Other		152	1.3%	50.0%			
Unknown		396	3.4%	34.3%			
TOTAL	1,988,871	11,714	100.0%	50.6%	589.0	169	

<sup>\*</sup> Population data by sex at birth, age, and race/ethnicity are from the 2016 U.S. Census population estimates

Population Age 13+: Population greater than or equal to 13 years old, estimate for 7/1/2016.

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

**Percent Living with AIDS:** The percent of reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year.

Rate: Number of adult/adolescent cases divided by the population age 13 years or older multiplied by 100,000.

Ratio (1 in X): Number of people for every 1 living HIV case in the population, or 1 living HIV case in every X number of people.

<sup>\*\*</sup> Population data by country of birth are from the 2015 American Community Survey

<sup>\*\*\*</sup> Data withheld due to low population and/or case counts

Table 13 – CD4 Test Results during 2016 for Adult/Adolescent HIV Cases Alive on 12/31/2016, by Sex at Birth, Race/Ethnicity and Country of Birth, Reported through 6/30/2017

			ADULT/A	DOLESCENT TO	TAL LIVING HI	V CASES		
SEX AT BIRTH	No.			Recer	nt CD4 Test R	esult		
		No. with Test	% with Test	Median Count	<200	200-349	350-499	500+
Male	7,745	5,248	67.8%	539	10.1%	14.9%	19.6%	55.4%
Female	3,969	2,758	69.5%	602	9.2%	11.7%	17.9%	61.1%
TOTAL	11,714	8,006	68.3%	558	9.8%	13.8%	19.1%	57.3%

		Adult/Adolescent Total Living HIV Cases								
RACE/ETHNICITY		Recent CD4 Test Result								
	No.	No. with Test	% with Test	Median Count	<200	200-349	350-499	500+		
Hispanic	1,069	759	71.0%	545	10.3%	14.1%	19.2%	56.4%		
Non-Hispanic	10,645	7,247	68.1%	559	9.8%	13.8%	19.0%	57.4%		
American Indian/Alaska Native, only	***	***	***	***	***	***	***	***		
Asian, only	102	65	63.7%	514	6.2%	13.8%	27.7%	52.3%		
Black, only	8,828	6,025	68.2%	548	10.4%	14.1%	19.4%	56.1%		
Native Hawaiian/Other Pacific Islander, only	***	***	***	***	***	***	***	***		
White, only	1,137	750	66.0%	656	4.7%	10.3%	15.2%	69.9%		
Multiracial/Other	569	403	70.8%	544	9.9%	14.9%	19.9%	55.3%		
TOTAL	11,714	8,006	68.3%	558	9.8%	13.8%	19.1%	57.3%		

	ADULT/ADOLESCENT TOTAL LIVING HIV CASES											
COUNTRY OF BIRTH				Recer	nt CD4 Test R	esult						
	No.	No. with Test	% with Test	Median Count	<200	200-349	350-499	500+				
United States	9,371	6,391	68.2%	562	10.3%	13.6%	18.4%	57.8%				
Foreign-born	1,947	1,390	71.4%	538	7.7%	14.3%	22.7%	55.3%				
Africa	1,278	914	71.5%	533	7.0%	15.2%	23.7%	54.0%				
Asia	77	52	67.5%	497	7.7%	17.3%	25.0%	50.0%				
Caribbean	120	88	73.3%	667	8.0%	9.1%	18.2%	64.8%				
Central America	320	227	70.9%	509	11.5%	15.9%	22.0%	50.7%				
Other	152	109	71.7%	613	5.5%	6.4%	17.4%	70.6%				
Unknown	396	225	56.8%	578	9.3%	16.0%	16.9%	57.8%				
TOTAL	11,714	8,006	68.3%	558	9.8%	13.8%	19.1%	57.3%				

<sup>\*\*\*</sup> Data withheld due to low population and/or case counts

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

Recent CD4 Test Result: The most recent CD4 test result measured in the specified year.

With Test: Number and percent of adult/adolescent total living HIV cases with a recent CD4 test result.

**Median Count:** Median CD4 count (cells per microliter), among adult/adolescent total living HIV cases, of the most recent CD4 test result measured in the specified year.

**CD4 Result Distribution (<200, 200-349, 350-499, 500+):** Percent of adult/adolescent living HIV cases with a recent CD4 test result distributed by the CD4 count results (cells per microliter).

Table 14 – Viral Load Test Results during 2016 for Adult/Adolescent HIV Cases Alive on 12/31/2016, by Sex at Birth, Race/Ethnicity and Country of Birth, Reported through 6/30/2017

		Adult/Adolescent Total Living HIV Cases						
SEX AT BIRTH			Recent Viral Lo	ad Test Result				
	No.	No. with Test	% with Test	% Suppressed	Median Unsuppressed			
Male	7,745	5,235	67.6%	83.6%	11,700			
Female	3,969	2,800	70.5%	84.3%	10,040			
TOTAL	11,714	8,035	68.6%	83.8%	11,267			

		Adult/Ado	LESCENT TOTAL LIVING	HIV CASES				
RACE/ETHNICITY		Recent Viral Load Test Result						
1016272111116111	No.	No. with Test	% with Test	% Suppressed	Median Unsuppressed			
Hispanic	1,069	763	71.4%	86.6%	18,253			
Non-Hispanic	10,645	7,272	68.3%	83.6%	10,560			
American Indian/Alaska Native, only	***	***	***	***	***			
Asian, only	102	67	65.7%	91.0%	9,565			
Black, only	8,828	6,046	68.5%	82.4%	10,780			
Native Hawaiian/Other Pacific Islander, only	***	***	***	***	***			
White, only	1,137	751	66.1%	90.9%	11,023			
Multiracial/Other	569	403	70.8%	85.1%	8,675			
TOTAL	11,714	8,035	68.6%	83.8%	11,267			

		ADULT/ADOLESCENT TOTAL LIVING HIV CASES							
COUNTRY OF BIRTH		Recent Viral Load Test Result							
	No.	No. with Test	% with Test	% Suppressed	Median Unsuppressed				
United States	9,371	6,413	68.4%	82.8%	11,280				
Foreign-born	1,947	1,385	71.1%	88.4%	10,398				
Africa	1,278	908	71.0%	89.0%	7,660				
Asia	77	51	66.2%	88.2%	23,325				
Caribbean	120	88	73.3%	85.2%	5,590				
Central America	320	227	70.9%	85.5%	11,192				
Other	152	111	73.0%	92.8%	33,992				
Unknown	396	237	59.8%	85.2%	15,240				
TOTAL	11,714	8,035	68.6%	83.8%	11,267				

<sup>\*\*\*</sup> Data withheld due to low population and/or case counts

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year.

Recent Viral Load Test Result: The most recent viral load test result measured in the specified year.

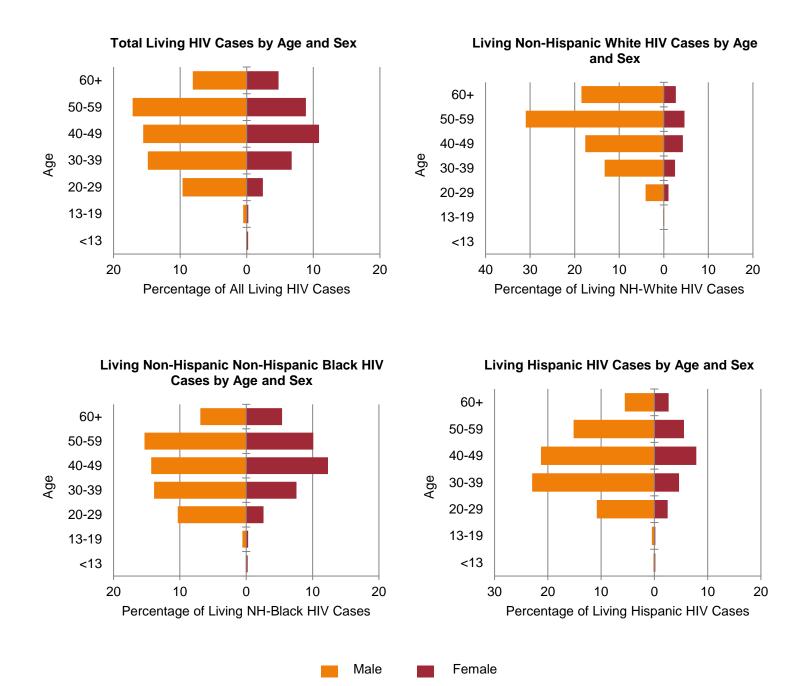
With Test: Number and percent of adult/adolescent total living HIV cases with a recent viral load test result.

**Percent Suppressed:** Percent of adult/adolescent total living HIV cases with a recent viral load test result measured in the specified year of less than 200 copies per milliliter.

**Median Unsuppressed:** Median unsuppressed viral load (copies per milliliter) among adult/adolescent total living HIV cases with the most recent viral load test result measured in the specified year of 200 copies per milliliter or greater.

### Section VII – HIV Cases by Expanded Demographics

Figure 9 – Population Pyramids of Total Living HIV Cases by Current Age, Sex at Birth, and Race/Ethnicity, Alive on 12/31/2016 and Reported through 6/30/2017



**Total Living HIV Cases:** Reported HIV diagnoses with or without an AIDS diagnosis and not reported to have died as of December 31<sup>st</sup> of the specified year.

Table 15 – Total Living Male HIV Cases by Current Age and Race/Ethnicity, Alive on 12/31/2016 and Reported through 6/30/2017

		Total	LIVING MALE HIV	CASES		
			RACE/E1	THNICITY		
AGE ON 12/31/2016		Hispanic	Non- Hispanic Black, only	Non- Hispanic White, only	Non- Hispanic Other Race	TOTAL MALES BY AGE GROUP
	Population	50,522	70,389	60,208	27,503	208,623
<13 (Pediatric)	Cases	2	6	0	2	10
<13 (Fediatric)	Rate	4.0	8.5	0.0	7.3	4.8
	Ratio (1 in X)	25,261	11,731		13,751	20,862
	Population	21,421	39,660	37,791	13,664	112,535
13-19	Cases	5	52	2	3	62
13-19	Rate	23.3	131.1	5.3	22.0	55.1
	Ratio (1 in X)	4,284	762	18,895	4,554	1,815
	Population	31,229	59,225	52,667	18,453	161,574
20.20	Cases	117	925	47	55	1,144
20-29	Rate	374.7	1,561.8	89.2	298.1	708.0
	Ratio (1 in X)	266	64	1,120	335	141
	Population	38,715	54,003	52,931	18,841	164,490
20.20	Cases	248	1,245	152	118	1,763
30-39	Rate	640.6	2,305.4	287.2	626.3	1,071.8
	Ratio (1 in X)	156	43	348	159	93
	Population	30,806	56,279	55,558	18,444	161,087
40.40	Cases	230	1,284	202	130	1,846
40-49	Rate	746.6	2,281.5	363.6	704.8	1,146.0
	Ratio (1 in X)	133	43	275	141	87
	Population	18,895	58,702	74,391	16,147	168,135
50.50	Cases	164	1,375	355	140	2,034
50-59	Rate	868.0	2,342.3	477.2	867.0	1,209.7
	Ratio (1 in X)	115	42	209	115	82
	Population	13,474	61,841	110,547	21,262	207,124
00.	Cases	60	621	212	69	962
60+	Rate	445.3	1,004.2	191.8	324.5	464.5
	Ratio (1 in X)	224	99	521	308	215
	Population	205,062	400,099	444,093	134,314	1,183,568
TOTAL MALES	Cases	826	5,508	970	517	7,821
BY RACE/ETHNICITY	Rate	402.8	1,376.7	218.4	384.9	660.8
TACE/ETHINICITY	Ratio (1 in X)	248	72	457	259	151

Age on [date]: Age group of living cases on the specified date.

**Total Living Male HIV Cases:** Reported HIV diagnoses with Male sex at birth with or without an AIDS diagnosis and not reported to have died as of December 31<sup>st</sup> of the specified year.

Population: Population estimate for 7/1/2016.

Rate: Number of HIV cases divided by the population multiplied by 100,000.

Ratio (1 in X): Number of people for every 1 living HIV case in the population, or 1 living HIV case in every X number of people.

Table 16 – Total Living Female HIV Cases by Current Age and Race/Ethnicity, Alive on 12/31/2016 and Reported through 6/30/2017

		TOTAL L	IVING FEMALE HI	/ CASES		
			RACE/E	THNICITY		
AGE ON 12/31/2016		Hispanic	Non- Hispanic Black, only	Non- Hispanic White, only	Non- Hispanic Other Race	TOTAL FEMALES BY AGE GROUP
	Population	48,164	67,982	57,341	26,162	199,649
<13 (Pediatric)	Cases	2	20	1	2	25
<13 (Pediatric)	Rate	4.2	29.4	1.7	7.6	12.5
	Ratio (1 in X)	24,082	3,399	57,341	13,081	7,985
	Population	19,992	39,169	35,665	13,413	108,239
13-19	Cases	2	26	1	0	29
13-19	Rate	10.0	66.4	2.8	0.0	26.8
	Ratio (1 in X)	9,996	1,506	35,665		3,732
	Population	27,544	62,021	49,981	18,940	158,486
20.20	Cases	27	234	12	15	288
20-29	Rate	98.0	377.3	24.0	79.2	181.7
	Ratio (1 in X)	1,020	265	4,165	1,262	550
	Population	31,725	63,433	53,512	22,573	171,243
30-39	Cases	50	679	29	44	802
30-39	Rate	157.6	1,070.4	54.2	194.9	468.3
	Ratio (1 in X)	634	93	1,845	513	213
	Population	26,445	68,087	57,906	22,508	174,946
40-49	Cases	85	1,105	49	50	1,289
40-49	Rate	321.4	1,622.9	84.6	222.1	736.8
	Ratio (1 in X)	311	61	1,181	450	135
	Population	18,757	71,845	76,510	19,683	186,795
50-59	Cases	60	905	53	39	1,057
50-59	Rate	319.9	1,259.7	69.3	198.1	565.9
	Ratio (1 in X)	312	79	1,443	504	176
	Population	17,716	89,310	131,946	26,561	265,533
CO.	Cases	29	483	31	24	567
60+	Rate	163.7	540.8	23.5	90.4	213.5
	Ratio (1 in X)	610	184	4,256	1,106	468
	Population	190,343	461,847	462,861	149,840	1,264,891
TOTAL FEMALES	Cases	255	3,452	176	174	4,057
BY RACE/ETHNICITY	Rate	134.0	747.4	38.0	116.1	320.7
TAOL/ETTINICITY	Ratio (1 in X)	746	133	2,629	861	311

Age on [date]: Age group of living cases on the specified date.

**Total Living Female HIV Cases:** Reported HIV diagnoses with Female sex at birth with or without an AIDS diagnosis and not reported to have died as of December 31st of the specified year.

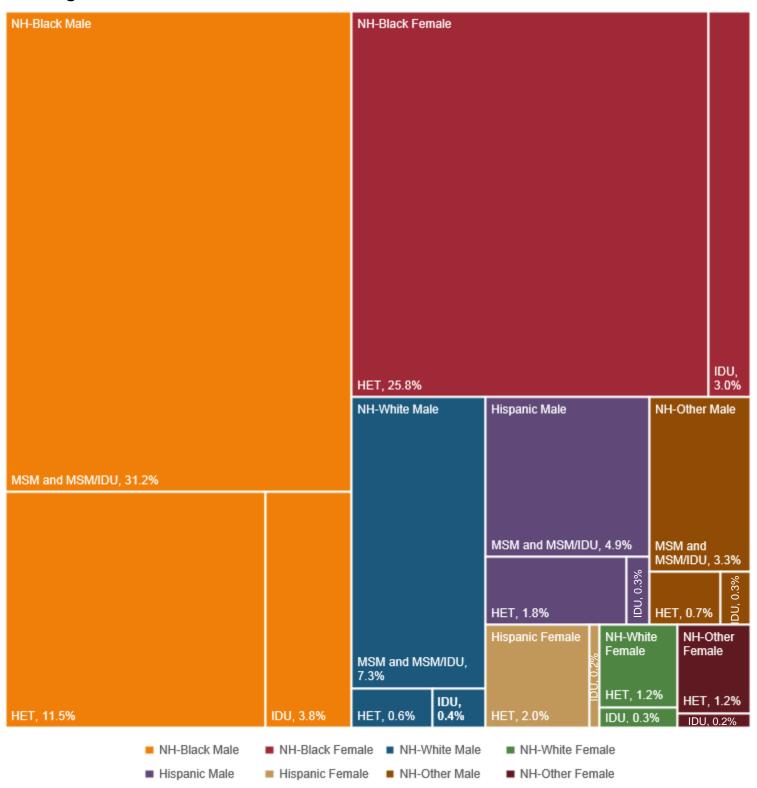
**Population:** Population estimate for 7/1/2016.

Rate: Number of HIV cases divided by the population multiplied by 100,000.

Ratio (1 in X): Number of people for every 1 living HIV case in the population, or 1 living HIV case in every X number of people.

### Section VIII – HIV Exposure Category

Figure 10 – Proportion of Adult/Adolescent Total Living HIV Cases, by Estimated Exposure Category, Race/Ethnicity, and Sex at Birth, Alive on 12/31/2016, Reported through 6/30/2017



Other exposure category not shown (<1%).

Multiple imputation was used to estimate and adjust for missing transmission category.

Men who have Sex with Men (MSM): Men who report a history of sexual contact with other men (homosexual contact) including men who report sexual contact with both men and women (bisexual contact).

**Injection Drug Use (IDU):** Men or women who report receiving an injection, either self-administered or given by another person, of a drug that was not prescribed by a physician.

MSM/IDU: Men who report a history of sexual contact with other men who also have engaged in injection drug use.

**Heterosexual Exposure (HET)**: Men or women who report a history of sexual contact with a person of the opposite sex who is known to have an HIV infection or at high risk for an HIV infection. High risk groups include bisexual men, IDUs and recipients of blood, blood components, transplants of organ or tissue and artificial insemination.

Table 17 – Adult/Adolescent HIV Diagnoses during 2016, Linked to Care, Late Diagnosis, and First CD4 Test Result, by Exposure Category and Sex at Birth, Reported through 6/30/2017

		А	DULT/ADOLESCE	NT REPORTED	HIV DIAGNOSE	S			
Exposure Category**	No.	% of Total	Linked to	Linked to Care		ked to Care Late HIV Diagnoses		First CD4 Test Result	
	NO.	% of Total	% 1 mo.	% 3 mo.	%	%	Median Count		
With Exposure	309	100.0%	83.8%	90.0%	23.0%	90.3%	390		
Men who have Sex with Men (MSM)	169	54.7%	81.7%	87.6%	19.5%	87.6%	390		
Injection Drug Users (IDU)	3	1.0%	***	***	***	***	***		
Men who have Sex with Men and Inject Drugs (MSM/IDU)	1	0.3%	***	***	***	***	***		
Heterosexual Exposure (HET)	136	44.0%	86.0%	92.6%	27.2%	93.4%	385		
Other Exposure	0	0.0%							
No Reported Exposure*	216		72.7%	79.6%	27.3%	83.3%	353		
TOTAL	525		79.2%	85.7%	24.8%	87.4%	374		

		А	DULT/ADOLESCE	NT REPORTED	HIV DIAGNOSE	S		
Male Exposure Category**	No.	% of Total	Linked to Care		nked to Care Late HIV Diagnoses		First CD4 Test Result	
	NO.	% of Total	% 1 mo.	% 3 mo.	%	%	Median Count	
With Exposure	216	100.0%	83.3%	89.4%	22.7%	89.8%	388	
Men who have Sex with Men (MSM)	169	78.2%	81.7%	87.6%	19.5%	87.6%	390	
Injection Drug Users (IDU)	3	1.4%	***	***	***	***	***	
Men who have Sex with Men and Inject Drugs (MSM/IDU)	1	0.5%	***	***	***	***	***	
Heterosexual Exposure (HET)	43	19.9%	88.4%	95.3%	34.9%	97.7%	357	
Other Exposure	0	0.0%						
No Reported Exposure	142		78.2%	81.7%	25.4%	85.9%	353	
TOTAL	358		81.3%	86.3%	23.7%	88.3%	376	

		A	ADULT/ADOLESCE	NT REPORTED	HIV DIAGNOSES	;		
FEMALE EXPOSURE CATEGORY**	Na	% of Total	Linked to	to Care Late HIV Diagnoses		First CD4 Test Result		
	No.	% of Total	% 1 mo.	% 3 mo.	%	<b>%</b> 91.4%	Median Count	
With Exposure	93	100.0%	84.9%	91.4%	23.7%	91.4%	435	
Injection Drug Users (IDU)	0	0.0%						
Heterosexual Exposure (HET)	93	100.0%	84.9%	91.4%	23.7%	91.4%	435	
Other Exposure	0	0.0%						
No Reported Exposure*	74		62.2%	75.7%	31.1%	78.4%	349	
TOTAL	167		74.9%	84.4%	26.9%	85.6%	370	

<sup>\*</sup> Includes 4 new HIV diagnoses with Presumed Female Heterosexual exposure

**Adult/Adolescent Reported HIV Diagnoses:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial HIV diagnosis during the specified year.

**Linked to Care:** Percent of adult/adolescent reported HIV diagnoses with a reported CD4 or viral load test performed less than or equal to 1 month or 3 months after their initial HIV diagnosis.

**Late HIV Diagnosis:** Percent of adult/adolescent reported HIV diagnoses with an initial AIDS diagnosis less than or equal to 12 months after their initial HIV diagnosis.

<sup>\*\* 2016</sup> reported HIV exposure data are preliminary.

<sup>\*\*\*</sup> Data withheld due to low population and/or case counts

**First CD4 Test Result Percent:** Percent of adult/adolescent reported HIV diagnoses with the first CD4 test result reported within 12 months following the initial HIV diagnosis.

**First CD4 Test Result Median Count:** Median CD4 count (cells per microliter) of the first CD4 test result reported within 12 months following initial HIV diagnosis.

Table 18 – Adult/Adolescent Living HIV Cases Alive on 12/31/2016, by Exposure Category and Sex at Birth, Reported through 6/30/2017

	ADULT/ADOLESCENT TOTAL LIVING HIV CASES						
Exposure Category	No.	% of Total with Exposure	% Living with AIDS				
With Exposure	9,042	100.0%	54.2%				
Men who have Sex with Men (MSM)	4,315	47.7%	47.2%				
Injection Drug Users (IDU)	513	5.7%	78.0%				
Men who have Sex with Men and Inject Drugs (MSM/IDU)	194	2.1%	70.1%				
Heterosexual Exposure (HET)	4,000	44.2%	57.9%				
Other Exposures	20	0.2%	65.0%				
No Reported Exposure*	2,672		38.5%				
TOTAL	11,714		50.6%				

	ADULT/ADOLESCENT TOTAL LIVING HIV CASES					
Male Exposure Category	No.	% of Total with Exposure	% Living with AIDS			
With Exposure	6,200	100.0%	53.0%			
Men who have Sex with Men (MSM)	4,315	69.6%	47.2%			
Injection Drug Users (IDU)	301	4.9%	76.4%			
Men who have Sex with Men and Inject Drugs (MSM/IDU)	194	3.1%	70.1%			
Heterosexual Exposure (HET)	1,382	22.3%	63.5%			
Other Exposures	8	0.1%	50.0%			
No Reported Exposure	1,545		37.7%			
TOTAL	7,745		49.9%			

	ADULT/ADOLESCENT TOTAL LIVING HIV CASES						
FEMALE EXPOSURE CATEGORY	No.	% of Total with Exposure	% Living with AIDS				
With Exposure	2,842	100.0%	56.9%				
Injection Drug Users (IDU)	212	7.5%	80.2%				
Heterosexual Exposure (HET)	2,618	92.1%	54.9%				
Other Exposures	12	0.4%	75.0%				
No Reported Exposure*	1,127		39.5%				
TOTAL	3,969		52.0%				

<sup>\*</sup> Includes 47 HIV cases with Presumed Female Heterosexual exposure.

**Percent Living with AIDS:** The percent of reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year.

Table 19 – Adult/Adolescent Total Living HIV Cases by Exposure Category, Race/Ethnicity, and Sex at Birth, Alive on 12/31/2016 and Reported through 6/30/2017

	Adult/Adolescent Total Living HIV Cases							
	Race/Ethnicity							
Exposure Category	Hi	ispanic	Non-Hisp	anic, Black, only	Non-Hispa	nic, White, only		
	No.	% of Total with Exposure	No.	% of Total with Exposure	No.	% of Total with Exposure		
With Exposure	917	100.0%	6,695	100.0%	874	100.0%		
Men who have Sex with Men (MSM)	481	52.5%	2,850	42.6%	655	74.9%		
Injection Drug Users (IDU)	38	4.1%	392	5.9%	45	5.1%		
Men who have Sex with Men and Inject Drugs (MSM/IDU)	23	2.5%	123	1.8%	37	4.2%		
Heterosexual Exposure (HET)	374	40.8%	3,315	49.5%	134	15.3%		
Other Exposures	1	0.1%	15	0.2%	3	0.3%		
No Reported Exposure*	152		2,133		263			
TOTAL	1,069	- -	8,828	-	1,137			

	Adult/Adolescent Total Living HIV Cases								
	Race/Ethnicity								
Male Exposure Category	Н	ispanic	Non-Hisp	anic, Black, only	Non-Hispa	Non-Hispanic, White, only			
	No.	% of Total with Exposure	No.	% of Total with Exposure	No.	% of Total with Exposure			
With Exposure	718	100.0%	4,276	100.0%	775	100.0%			
Men who have Sex with Men (MSM)	481	67.0%	2,850	66.7%	655	84.5%			
Injection Drug Users (IDU)	27	3.8%	223	5.2%	30	3.9%			
Men who have Sex with Men and Inject Drugs (MSM/IDU)	23	3.2%	123	2.9%	37	4.8%			
Heterosexual Exposure (HET)	186	25.9%	1,076	25.2%	51	6.6%			
Other Exposures	1	0.1%	4	0.1%	2	0.3%			
No Reported Exposure	101		1,171		193				
TOTAL	819		5,447	-	968				

	Adult/Adolescent Total Living HIV Cases								
		Race/Ethnicity							
FEMALE EXPOSURE CATEGORY	Hispanic		Non-Hisp	anic, Black, only	Non-Hispanic, White, only				
	No.	% of Total with Exposure	No.	% of Total with Exposure	No.	% of Total with Exposure			
With Exposure	199	100.0%	2,419	100.0%	99	100.0%			
Injection Drug Users (IDU)	11	5.5%	169	7.0%	15	15.2%			
Heterosexual Exposure (HET)	188	94.5%	2,239	92.6%	83	83.8%			
Other Exposures	0	0.0%	11	0.5%	1	1.0%			
No Reported Exposure*	51		962		70				
TOTAL	250		3,381		169				

<sup>\*</sup> Includes 3 Hispanic cases, 41 non-Hispanic black cases, and 1 non-Hispanic white case with Presumed Female Heterosexual exposure

Table 20 – CD4 Test Results during 2016 for Adult/Adolescent HIV Cases Alive on 12/31/2016, by Exposure Category, Reported through 6/30/2017

			ADULT/AD	OLESCENT TO	TAL LIVING H	IIV CASES						
Exposure Category		Recent CD4 Test Results										
	No.	No. with Test	% with Test	Median Count	<200	200-349	350-499	500+				
With Exposure	9,042	6,402	70.8%	555	9.6%	13.4%	19.9%	57.1%				
Men who have Sex with Men (MSM)	4,315	3,000	69.5%	564	8.4%	13.1%	19.5%	59.0%				
Injection Drug Users (IDU)	513	341	66.5%	465	13.2%	17.6%	23.2%	46.0%				
Men who have Sex with Men and Inject Drugs (MSM/IDU)	194	124	63.9%	543	9.7%	12.9%	21.0%	56.5%				
Heterosexual Exposure (HET)	4,000	2,923	73.1%	556	10.3%	13.3%	19.8%	56.6%				
Other Exposures	20	14	70.0%	430	28.6%	14.3%	14.3%	42.9%				
No Reported Exposure*	2,672	1,604	60.0%	568	10.7%	15.1%	15.9%	58.3%				
TOTAL	11,714	8,006	68.3%	558	9.8%	13.8%	19.1%	57.3%				

<sup>\*</sup> Includes 47 cases with Presumed Female Heterosexual exposure

Table 21 – Viral Load Test Results during 2016 for Adult/Adolescent HIV Cases Alive on 12/31/2016, by Exposure Category, Reported through 6/30/2017

		Adult/Adolescent Total Living HIV Cases							
Exposure Category	No		Recent Viral Lo	ad Test Results					
	No.	No. with Test	% with Test	% Suppressed	Median Count				
With Exposure	9,042	6,424	71.0%	84.6%	11,196				
Men who have Sex with Men (MSM)	4,315	2,995	69.4%	84.5%	11,660				
Injection Drug Users (IDU)	513	343	66.9%	81.9%	26,442				
Men who have Sex with Men and Inject Drugs (MSM/IDU)	194	124	63.9%	82.3%	5,350				
Heterosexual Exposure (HET)	4,000	2,949	73.7%	85.3%	10,233				
Other Exposures	20	13	65.0%	69.2%	4,685				
No Reported Exposure*	2,672	1,611	60.3%	80.7%	11,749				
TOTAL	11,714	8,035	68.6%	83.8%	11,267				

<sup>\*</sup> Includes 47 cases with Presumed Female Heterosexual exposure

Recent CD4 Test Result: The most recent CD4 test result measured in the specified year.

CD4 With Test: Number and percent of adult/adolescent total living HIV cases with a recent CD4 test result.

**Median Count:** Median CD4 count (cells per microliter), among adult/adolescent total living HIV cases, of the most recent CD4 test result measured in the specified year.

**CD4 Result Distribution (<200, 200-349, 350-499, 500+):** Percent of adult/adolescent living HIV cases with a recent CD4 test result distributed by the CD4 count results (cells per microliter).

Recent Viral Load Test Result: The most recent viral load test result measured in the specified year.

Viral Load With Test: Number and percent of adult/adolescent total living HIV cases with a recent viral load test result.

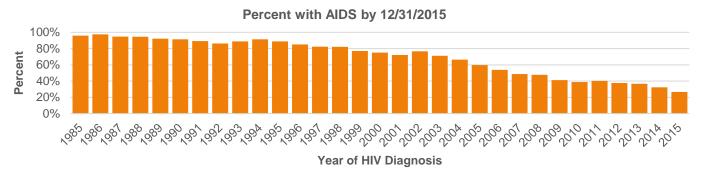
**Percent Suppressed:** Percent of adult/adolescent total living HIV cases with a recent viral load test result measured in the specified year of less than 200 copies per milliliter.

**Median Unsuppressed:** Median unsuppressed viral load (copies per milliliter) among adult/adolescent total living HIV cases with the most recent viral load test result measured in the specified year of 200 copies per milliliter or greater.

### Section IX - Disease Progression and Mortality

# Figure 11 – Trends in Disease Progression by Year of HIV Diagnosis, 1985-2015, Reported through 6/30/2017

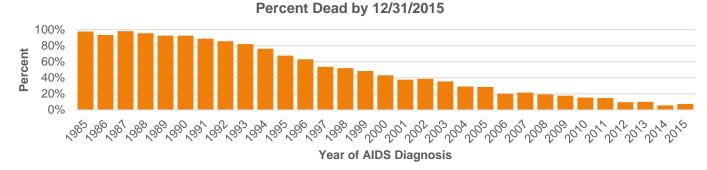
Number of Adult/Adolescent Reported HIV Cases, Age 13+ at HIV Diagnosis, with or without an AIDS Diagnosis by 12/31/2015 (Adult/Adolescent Reported HIV Diagnoses), Number of Adult/Adolescent Reported HIV Cases with an AIDS Diagnosis by 12/31/2016 (Reported AIDS Diagnoses), Percent by Year of HIV Diagnosis of Adult/Adolescent Reported HIV Diagnoses with a Reported AIDS Diagnosis by 12/31/2016, the Average Years from HIV Diagnosis to AIDS Diagnosis for Cases with an AIDS Diagnosis, and the Percent by Year of HIV Diagnosis of Reported Adult/Adolescent HIV Diagnoses with a Reported AIDS Diagnosis at 1 Year, 2 Years, 5 Years, and 10 Years after HIV Diagnosis, by Year of HIV Diagnosis from 1985 through 2015, as Reported by Name through 6/30/2017



			Adult/Ad	OOLESCENT REPORTED I	ED HIV DIAGNOSES							
YEAR OF HIV		Re	ported AIDS Diag	gnoses	Percent with AIDS by Years After HIV Diagnosis							
DIAGNOSIS	No.	No.	% with AIDS	Mean Years from HIV to AIDS	1 Year	2 Years	5 Years	10 Years				
<1985	110	104	94.5%	7.0	46.4%	46.4%	50.0%	61.8%				
1985	217	208	95.9%	5.9	41.5%	42.9%	48.4%	73.7%				
1986	283	276	97.5%	4.9	43.1%	44.2%	54.1%	85.5%				
1987	385	365	94.8%	3.7	49.1%	50.1%	65.2%	86.2%				
1988	433	409	94.5%	3.3	49.2%	53.1%	72.5%	87.5%				
1989	527	486	92.2%	2.9	50.3%	52.9%	73.2%	86.7%				
1990	537	491	91.4%	2.8	48.8%	56.4%	74.7%	86.4%				
1991	612	546	89.2%	2.5	51.5%	59.3%	76.3%	84.0%				
1992	542	468	86.3%	2.9	48.9%	55.5%	70.5%	78.6%				
1993	457	406	88.8%	2.1	59.1%	65.2%	75.9%	83.8%				
1994	440	402	91.4%	1.9	66.1%	72.3%	78.6%	86.6%				
1995	459	408	88.9%	1.8	64.3%	69.7%	75.6%	85.0%				
1996	437	372	85.1%	2.0	60.4%	63.2%	72.8%	81.0%				
1997	449	370	82.4%	1.9	61.0%	64.4%	70.4%	78.6%				
1998	429	352	82.1%	1.9	59.4%	63.2%	69.9%	78.3%				
1999	475	366	77.1%	1.6	59.6%	62.9%	67.6%	73.5%				
2000	488	366	75.0%	1.8	55.5%	58.2%	65.0%	71.1%				
2001	494	356	72.1%	1.6	53.6%	55.7%	64.4%	69.2%				
2002	530	406	76.6%	1.2	62.1%	65.7%	71.1%	74.0%				
2003	601	428	71.2%	1.2	57.6%	59.6%	64.7%	69.7%				
2004	654	434	66.4%	1.3	53.4%	55.8%	58.7%	65.0%				
2005	679	406	59.8%	1.0	48.9%	51.4%	55.1%	59.1%				
2006	724	390	53.9%	1.3	41.2%	43.8%	48.8%	53.2%				
2007	888	432	48.6%	1.4	36.0%	37.4%	42.8%					
2008	817	390	47.7%	1.2	35.7%	38.3%	43.8%					
2009	722	298	41.3%	1.3	30.7%	32.4%	37.1%					
2010	737	287	38.9%	0.9	29.3%	32.2%	36.8%					
2011	644	259	40.2%	0.8	32.0%	35.1%	39.0%					
2012	615	232	37.7%	0.6	31.9%	34.3%						
2013	621	227	36.6%	0.4	32.7%	34.8%						
2014	617	200	32.4%	0.4	27.7%	30.0%						
2015	597	159	26.6%	0.2	25.1%							
TOTAL	17,220	11,299	65.6%	2.0	45.7%	48.9%	56.1%	62.6%				

## Figure 12 – Trends in Survival Times by Year of AIDS Diagnosis, 1985-2015, Reported through 6/30/2017

Number of Adult/Adolescent Reported HIV Cases, Age 13+ at HIV Diagnosis, with an AIDS Diagnosis by 12/31/15 (Adult/Adolescent Reported AIDS Diagnoses), Number of Adult/Adolescent Reported AIDS Diagnosis Reported to Have Died of Any Cause by 12/31/2016 (Reported AIDS Deaths), Percent by Year of AIDS Diagnosis of Adult/Adolescent Reported AIDS Diagnoses with a Reported AIDS Death (Percent Dead) by 12/31/2016, the Average Years from AIDS Diagnosis to Death for Cases that have Died, and the Percent by Year of AIDS Diagnosis of Adult/Adolescent Reported AIDS Diagnoses Not Reported to Have Died (Percent Alive) at 1 Year, 2 Years, 5 Years, and 10 Years after AIDS Diagnosis, by Year of AIDS Diagnosis from 1985 through 2015, as Reported by Name through 6/30/2017



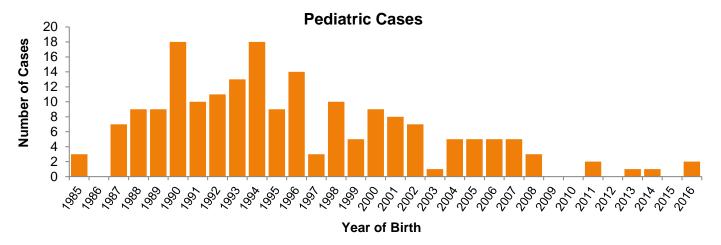
	ADULT/ADOLESCENT REPORTED AIDS DIAGNOSES								
YEAR OF		Reported AIDS Deaths			Percent A	Percent Alive by Years After AIDS Diagnosis			
AIDS				Mean					
DIAGNOSIS	No.	No.	% Dead	Years from AIDS to	1 Year	2 Years	5 Years	10 Years	
				Death					
<1985	58	58	100.0%	0.9	32.8%	6.9%	3.4%	0.0%	
1985	88	86	97.7%	1.4	40.9%	15.9%	11.4%	3.4%	
1986	119	111	93.3%	1.8	51.3%	31.9%	12.6%	9.2%	
1987	197	193	98.0%	2.0	52.3%	29.4%	10.7%	6.1%	
1988	217	207	95.4%	1.9	61.3%	35.5%	12.4%	6.5%	
1989	290	268	92.4%	2.9	68.3%	50.3%	21.0%	12.8%	
1990	306	283	92.5%	2.9	65.4%	48.7%	22.2%	13.7%	
1991	382	339	88.7%	2.4	67.8%	51.3%	19.4%	14.7%	
1992	465	398	85.6%	3.0	74.2%	53.1%	25.6%	20.6%	
1993	493	404	81.9%	3.3	72.4%	57.0%	33.5%	26.0%	
1994	531	404	76.1%	3.3	75.3%	55.2%	40.5%	30.5%	
1995	516	349	67.6%	4.3	74.2%	64.5%	54.1%	42.8%	
1996	448	282	62.9%	5.1	81.3%	75.2%	64.5%	49.3%	
1997	380	204	53.7%	4.4	81.1%	75.8%	64.7%	54.7%	
1998	349	182	52.1%	4.9	85.4%	81.9%	71.1%	55.9%	
1999	371	180	48.5%	4.3	84.9%	79.2%	69.5%	57.4%	
2000	379	163	43.0%	5.8	91.6%	89.4%	78.6%	65.7%	
2001	375	141	37.6%	4.0	87.5%	84.0%	75.5%	66.9%	
2002	404	156	38.6%	3.9	86.6%	83.9%	74.0%	66.6%	
2003	448	159	35.5%	3.6	87.7%	82.6%	75.4%	68.1%	
2004	438	127	29.0%	4.1	90.2%	87.2%	82.0%	74.7%	
2005	465	132	28.4%	3.2	88.4%	86.5%	79.6%	72.9%	
2006	427	86	20.1%	3.5	93.4%	91.1%	86.4%	79.9%	
2007	417	90	21.6%	2.6	90.2%	87.5%	83.7%		
2008	371	72	19.4%	2.0	90.3%	87.9%	83.6%		
2009	305	54	17.7%	1.8	90.8%	88.9%	83.9%		
2010	360	55	15.3%	1.9	93.1%	90.3%	86.7%		
2011	290	43	14.8%	2.0	93.8%	91.0%	86.2%		
2012	345	33	9.6%	0.9	93.3%	91.6%			
2013	353	35	9.9%	0.8	93.5%	91.5%			
2014	302	17	5.6%	0.7	96.0%	94.7%			
2015*	257	19	7.4%	0.4	93.4%				
TOTAL	11,146	5,330	47.8%	3.3	82.4%	74.4%	63.2%	56.4%	

<sup>\*2015</sup> AIDS deaths are preliminary.

#### Section X – Pediatric Cases

#### Figure 13 - Trends in Pediatric HIV Cases, 1985-2016, Reported through 6/30/2017

Number of Pediatric Reported HIV Cases, Age <13 at HIV Diagnosis, with or without an AIDS Diagnosis (Pediatric Reported HIV Diagnoses) by Year of Birth, by Year of HIV Diagnosis, by Year of AIDS Diagnosis, and by Year of Death Due to Any Cause, and Number of Pediatric Reported HIV Cases, Age <13 at HIV Diagnosis, with or without an AIDS Diagnosis and Not Reported to have Died as of December 31st of Each Year (Pediatric Total Living HIV Cases) from 1985 through 2016, as Reported by Name through 6/30/2017



	PEDIATRIC REPORTED HIV DIAGNOSES			PEDIATRIC TOTAL LIVING HIV CASES		
YEAR	No. by Year of Birth	No. by Year of HIV Diagnosis	No. by Year of AIDS Diagnosis	No. by Year of Death	No. Alive on 12/31 of Each Year	
<1985	20	1	0	0		
1985	3	5	2	1	6	
1986	0	6	0	0	12	
1987	7	6	4	0	18	
1988	9	3	3	2	20	
1989	9	6	5	2	24	
1990	18	10	5	4	30	
1991	10	11	8	3	39	
1992	11	12	7	2	48	
1993	13	8	8	4	52	
1994	18	10	6	2	60	
1995	9	9	8	6	62	
1996	14	13	11	2	72	
1997	3	5	5	0	77	
1998	10	4	1	3	78	
1999	5	13	6	0	90	
2000	9	6	3	1	95	
2001	8	5	3	2	98	
2002	7	11	3	0	109	
2003	1	2	1	4	107	
2004	5	4	2	2	109	
2005	5	8	3	2	115	
2006	5	12	3	1	126	
2007	5	20	2	1	145	
2008	3	5	2	0	151	
2009	0	3	0	0	154	
2010	0	1	2	2	154	
2011	2	4	3	0	158	
2012	0	1	0	0	160	
2013	1	2	1	1	161	
2014	1	4	2	0	165	
2015	0	0	8	0	164	
2016	2	3	1	0	168	
TOTAL	213	213	118	47		

## Table 22 – Pediatric HIV Total Living HIV Cases, Diagnosed in Maryland, Alive on 12/31/2016, by Jurisdiction, Reported through 6/30/2017

JURISDICTION OF RESIDENCE AT DIAGNOSIS	PEDIATRIC TOTAL LIVING HIV CASES		
JURISDICTION OF RESIDENCE AT DIAGNOSIS	No.	% of Total	
Calvert	2	1.2%	
Charles	4	2.4%	
Frederick	6	3.6%	
Montgomery	46	27.4%	
Prince George's	110	65.5%	
TOTAL	168	100.0%	

**Jurisdiction of Residence at Diagnosis:** Jurisdiction of residence at later time of initial HIV diagnosis or initial AIDS diagnosis.

**Pediatric Total Living HIV Cases:** Reported HIV diagnosis, age less than 13 years at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

Table 23 – Pediatric Total Living HIV Cases, Diagnosed in Maryland, by Sex at Birth and Race/Ethnicity, Alive on 12/31/2016 and Reported through 6/30/2017

SEX AT BIRTH	PEDIATRIC TOTAL LIVING HIV CASES			
SEX AT BIRTH	No.	% of Total		
Male	85	50.6%		
Female	83	49.4%		
TOTAL	168	100.0%		

RACE/ETHNICITY	PEDIATRIC TOTAL LIVING HIV CASES			
RACE/ETHNICITY	No.	% of Total		
Hispanic	10	6.0%		
Non-Hispanic	158	94.0%		
American Indian/ Alaska Native, only	0	0.0%		
Asian, only	0	0.0%		
Black, only	138	82.1%		
Native Hawaiian/Other Pacific Islander, only	0	0.0%		
White, only	13	7.7%		
Multiracial/Other	7	4.2%		
Total	168	100.0%		

### Glossary of Terms

**Adult/Adolescent Living HIV Cases with AIDS:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

**Adult/Adolescent Living HIV Cases without AIDS:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

**Adult/Adolescent Reported AIDS Diagnoses:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial AIDS diagnosis during the specified year.

**Adult/Adolescent Reported HIV Diagnoses:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial HIV diagnosis during the specified year.

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

Age at AIDS Diagnosis: Age group at time of initial AIDS diagnosis.

Age at HIV Diagnosis: Age group at time of initial HIV diagnosis.

**Age on [date]:** Age group of living cases on the specified date.

AIDS Deaths: Reported HIV diagnoses with an AIDS diagnosis that have died due to any cause.

CD4 Result Distribution (<200, 200-349, 350-499, 500+): Percent of cases with a CD4 test distributed by their CD4 count results (cells per microliter).

CD4 With Test: Number and percent of adult/adolescent total living HIV cases with a recent CD4 test result.

Corrections: Residence in a state or federal prison. Does not include local jails and detention centers.

Current Residence: Jurisdiction of residence from the most recent report since 1/1/2009.

First CD4 Test Result Median Count: Median CD4 count (cells per microliter) of the first CD4 test result reported within 12 months following initial HIV diagnosis.

**First CD4 Test Result Percent:** Percent of adult/adolescent reported HIV diagnoses with the first CD4 test result reported within 12 months following the initial HIV diagnosis.

Jurisdiction of Current Residence: Jurisdiction of residence from the most recent report since 1/1/2009.

Jurisdiction of Residence: Jurisdiction of residence at diagnosis or current residence.

Jurisdiction of Residence at AIDS Diagnosis: Jurisdiction of residence at time of initial AIDS diagnosis.

**Jurisdiction of Residence at Diagnosis:** Jurisdiction of residence at the later time of initial HIV diagnosis or time of initial AIDS diagnosis.

Jurisdiction of Residence at HIV Diagnosis: Jurisdiction of residence at time of initial HIV diagnosis.

**Late HIV Diagnosis:** Percent of adult/adolescent reported HIV diagnoses with an initial AIDS diagnosis less than or equal to 12 months after their initial HIV diagnosis.

**Linked to Care:** Percent of adult/adolescent reported HIV diagnoses with a reported CD4 or viral load test performed less than or equal to 1 month or 3 months after their initial HIV diagnosis.

**Living HIV Cases with AIDS:** Reported HIV diagnoses with an AIDS diagnosis and not reported to have died as of December 31st of the specified year.

**Living HIV Cases without AIDS:** Reported HIV diagnoses without an AIDS diagnosis and not reported to have died as of December 31st of the specified year.

**Mean Years from HIV Diagnosis:** Mean or average number of years from initial HIV diagnosis to initial AIDS diagnosis for cases with a reported AIDS diagnosis.

**Mean Years from AIDS diagnosis to AIDS Death:** Mean or average number of years from initial AIDS diagnosis to death for adult/adolescent reported AIDS diagnoses with a reported death.

**Median Count:** Median CD4 count (cells per microliter), among adult/adolescent total living HIV cases, of the most recent CD4 test result measured in the specified year.

**Median Unsuppressed:** Median unsuppressed viral load (copies per milliliter) among adult/adolescent living HIV cases with the most recent viral load test result measured in the specified year of 200 copies per milliliter or greater.

**Pediatric Total Living HIV Cases:** Reported HIV diagnosis, age less than 13 years at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year.

**Percent Change:** The percent change in number of adult/adolescent total living HIV cases from residence at diagnosis to current residence.

**Percent Alive by Years after AIDS Diagnosis:** Percent of adult/adolescent reported AIDS diagnoses not reported to have died at 1 year, 2 years, 5 years and 10 years after initial AIDS diagnosis, by year of AIDS diagnosis.

**Percent Late HIV Diagnosis:** Percent of adult/adolescent reported AIDS diagnoses with an initial HIV diagnosis less than or equal to 12 months prior to their initial AIDS diagnosis.

**Percent Suppressed:** Percent of adult/adolescent total living HIV cases with a recent viral load test result measured in the specified year of less than 200 copies per milliliter.

**Percent with AIDS:** Percent of adult/adolescent reported HIV diagnoses in the specified year with an initial AIDS diagnosis by 12/31/2016.

**Percent with AIDS by Years after HIV Diagnosis:** Percent of adult/adolescent reported HIV diagnoses in the specified year with an initial AIDS diagnosis at 1 year, 2 years, 5 years and 10 years after HIV diagnosis.

**Population:** Population estimate for 7/1/2016.

**Population Age 13+:** Population age 13 years or older, estimate for 7/1/2016.

Rate: Number of HIV cases divided by the population multiplied by 100,000.

Ratio (1 in X): Number of people for every 1 living HIV case in the population, or 1 living HIV case in every X number of people.

Recent CD4 Test Result: The most recent CD4 test result measured in the specified year.

Recent Viral Load Test Result: The most recent viral load test result measured in the specified year.

**Reported AIDS Deaths:** Reported HIV diagnoses with an AIDS diagnosis, reported to have died of any cause during the specified year.

Reported AIDS Diagnoses: Reported HIV diagnoses with an initial AIDS diagnosis during the specified year.

Reported HIV Diagnoses: Reported HIV diagnoses with an initial HIV diagnosis during the specified year.

**Residence at Diagnosis:** Jurisdiction of residence at later time of initial HIV diagnosis or initial AIDS diagnosis.

Retained in HIV Care: HIV Diagnosed with a CD4 test result performed in the specified year.

**Suppressed Viral Load:** HIV Diagnosed with the most recent viral load measured in the specified year of less than 200 copies per milliliter.

**Total Living HIV Cases:** Reported HIV diagnoses with or without an AIDS diagnosis and not reported to have died as of December 31<sup>st</sup> of the specified year.

Viral Load With Test: Number and percent of adult/adolescent total living HIV cases with a recent viral load test result.